

10 20 30 40 50
AUCACUCUCUUUAAUCACUA CUCACAGUAA CCUCAACUCCUGCCACA AUGUACAGGAU

70 80 90 100 110
AACUCCUGUCUUGCAUUGCACUA AGUCUUGCACUUGUCACAA ACAGUGCACCUACUUC
ACGTGATT CAGAACG TGAACAGT GTTTGTC

77-91 92-106

130 140 150 160 170
GUUCUACAAAGAAAACACAGCUACAACUGGAGCAUUUACUGCUGGAUUUACAGAUGAU

190 200 210 220 230
UGAAUGGAAUUA AUA AUUACAAGAAUCCCAAACUCACCAGGAUGCUCACAUUUAA GUU
ATGTTCTTAGGGTTTGAGTGGTCCTACGAGTGTA AATTCAA

198-212 213-227 228-242

250 260 270 280 290
ACAUGCCCAAGAAGGCCACAGAACUGAAACAUCUUCAGUGUCUAGAAGAAGAACUCA
TGTACGGGTTCTTCCGG TCTTCTTGAGTT

243-257 267-301

310 320 330 340 350
CUCUGGAGGAAGUGCUAAAAUUUAGCUCAAAGCAAAAACUUUCACUUAAGACCCAGGGA
GAGACCTCCTTCACGA GTGAATTCTGGGTCCCT

302-316 342-356

370 380 390 400 410
UAAUCAGCAAUAUCAACGUAAUAGUUCUGGAACUAAAGGGAUCUGAAACAACA UUCAU
ATTAGTCGTTA

357-371

430 440 450 460 470
GUGAAUAUGCUGAUGAGACAGCAACCAUUGUAGAAUUUCUGAACAGAUUGGAUUACCUU

490 500 510 520 530
GUCAAAGCAUCAUCUCAACACUUAACUUGAUAAUUUAGUGCUUCCCACUUA AAACAUAUC

550 560 570 580 590 800
GGCCUUCUAUUUAUUUAAUAUUUAAUUUUAUUAUUUAUUGUUGAUGUAUGGUUUUCUA

610 620 630 640 650 660
CCUAUUGUAA CUUUAUUCUUAUCUUA AACUAUAAAUAUGGAUCUUUUUAUGAUUCUUL

670 680 690 700 710 720
UUGUAA GCCCUAGGGGCUCUAAA AUGGUUUCACUUAUUUAUCCCCAAAUAUUUAUUUU

730 740 750 760 770 780
UGUUGAUGUUA AAUAUAGUAUCUAUGUAGAUUGGUUAGUAAA CUAUUUA UA AAUUU

790 800
AUAAAUAUAAAAAAAAAAAAA C

Fig.2

10 20 30 40 50 60
GAUCGUUAGCUUCUCCUGAUAAACUAAUUGCCUCACAUUGUCACUGCAAUUCGACACCUA

70 80 90 100 110 120
UUA AUGGGUCUACCUCCCAACUGCUUCCCCUCUGUUCUCCUGCUAGCAUGUGCCGGC
GAGTGGAGGGTTGAC GAAGGGGGAGACAAG CG

70-84 85-99

130 140 150 160 170 180
AACUUUGUCCACGGACACAAGUGCGAUUACCUUACAGGAGAUCAUCAAACUUUGAAC
TTGAAACAGGTGC CTGTGTTACGCTAT ACTTG

119-133 134-148

190 200 210 220 230 240
AGCCUCACAGAGCAGAAGACUCUGUGCACCGAGUUGACCGUAACAGACAUCUUUGCUGCC
TCGGAGTGTCTCGTCTTCTGAGACA

178-190 191-205

250 260 270 280 290 300
UCCAAGAACACAACUGAGAAGGAAACCUUCUGCAGGGCUGCGACUGUGCUCCGGCAGUUC
TGGAAGACGTCCCGA CGCTGACACGAGGCC

265-279 280-294

310 320 330 340 350 360
UACAGCCACCAUGAGAAGGACACUCGCGUGCCUGGGUGCGACUGCACAGCAGUUCCACAGG

370 380 390 400 410 420
CACAAGCAGCUGAUCCGAUUCUGAAACGGCUCGACAGGAACCUCUGGGGCCUGGCGGGC
GCTAAGGACTTTGCC GAGCTGTCTTGGAG

376-390 391-405

430 440 450 460 470 480
UUGAAUUCUGUCCUGUGAAGGAAGCCAACCAGAGUACGUUGGAAAACUUCUUGGAAAGG

490 500 510 520 530 540
CUAAAGACGAUCAUGAGAGAGAAAUAUCAAAGUGUUCGAGCUGAAUAUUUUAAUUUAUG

550 560 570 580 590 600
AGUUUUUGAUAGCUUUUAUUUUUAAGUAUUUAUAUUUAUAACUCAUCAUAAAAUAAG

610
UAUAUAUAGAAUCUAAAA

Fig.3

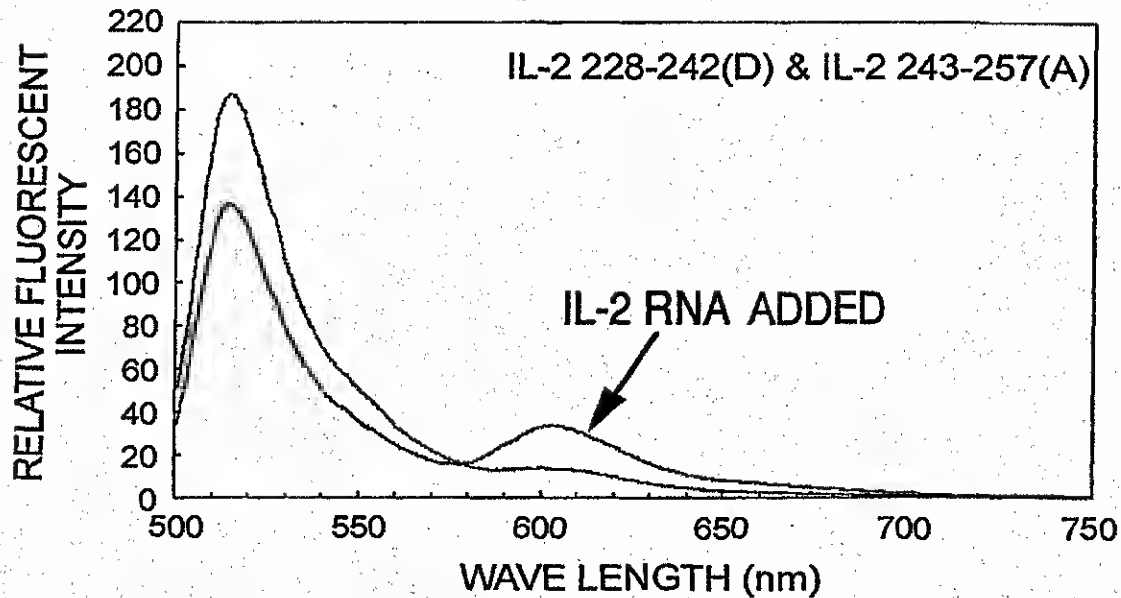


Fig.4

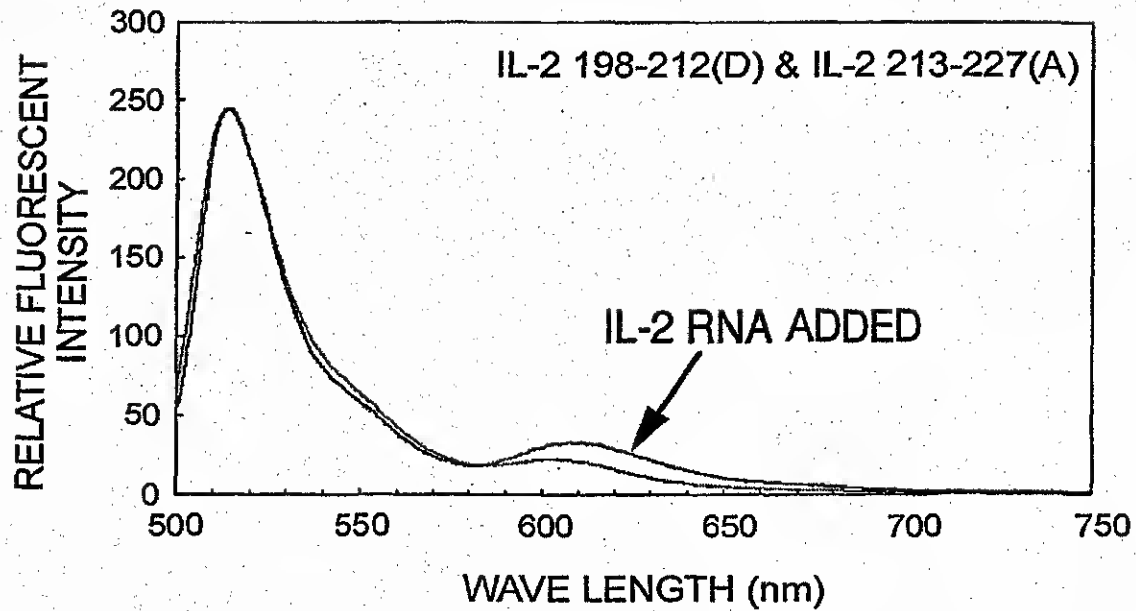


Fig.5

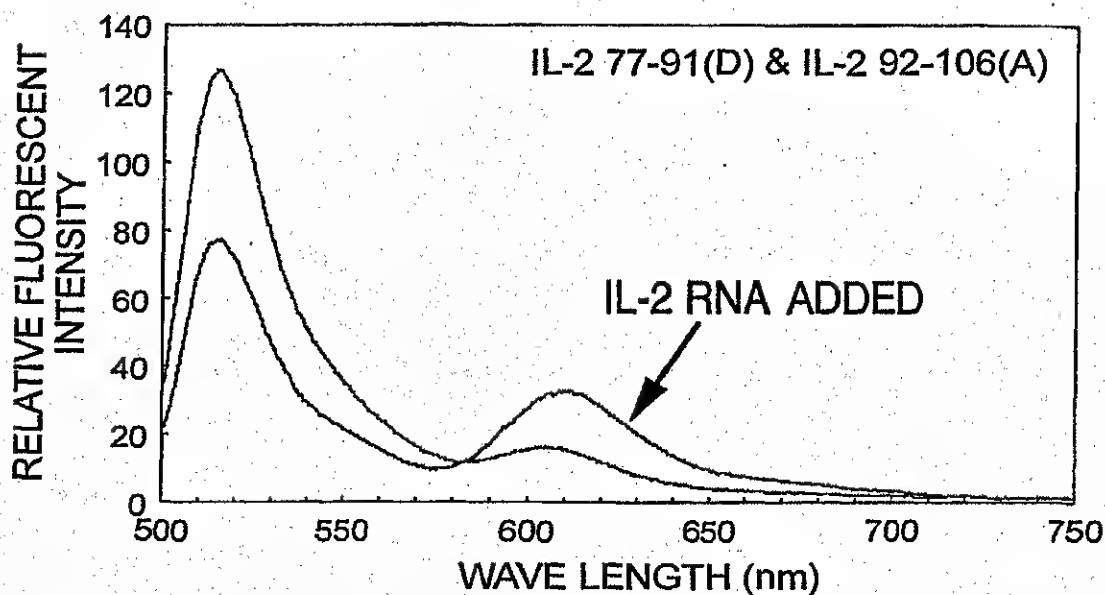


Fig.6

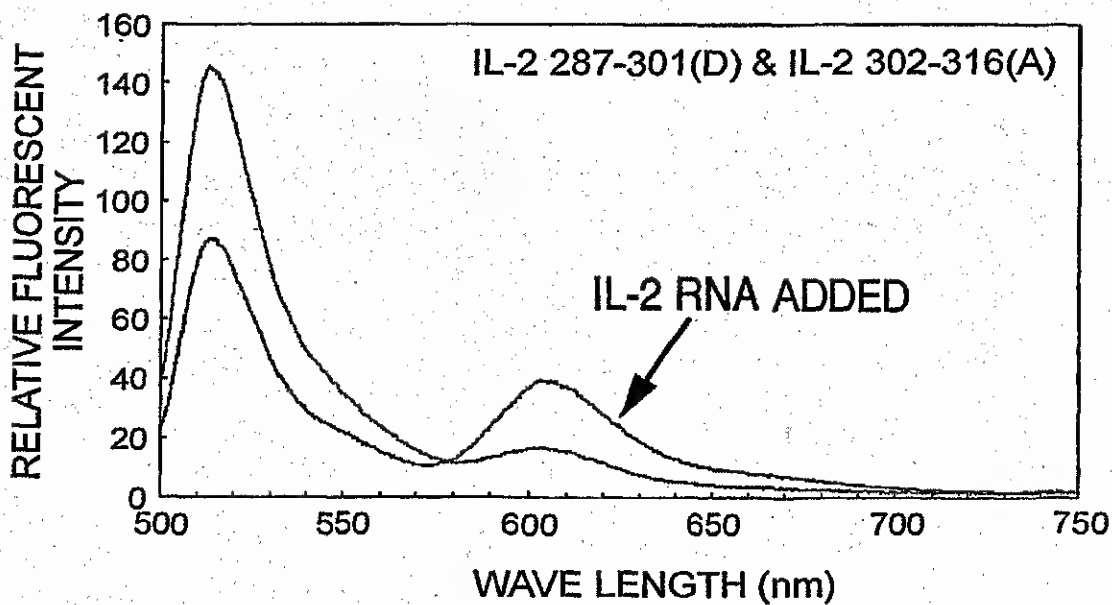


Fig.7

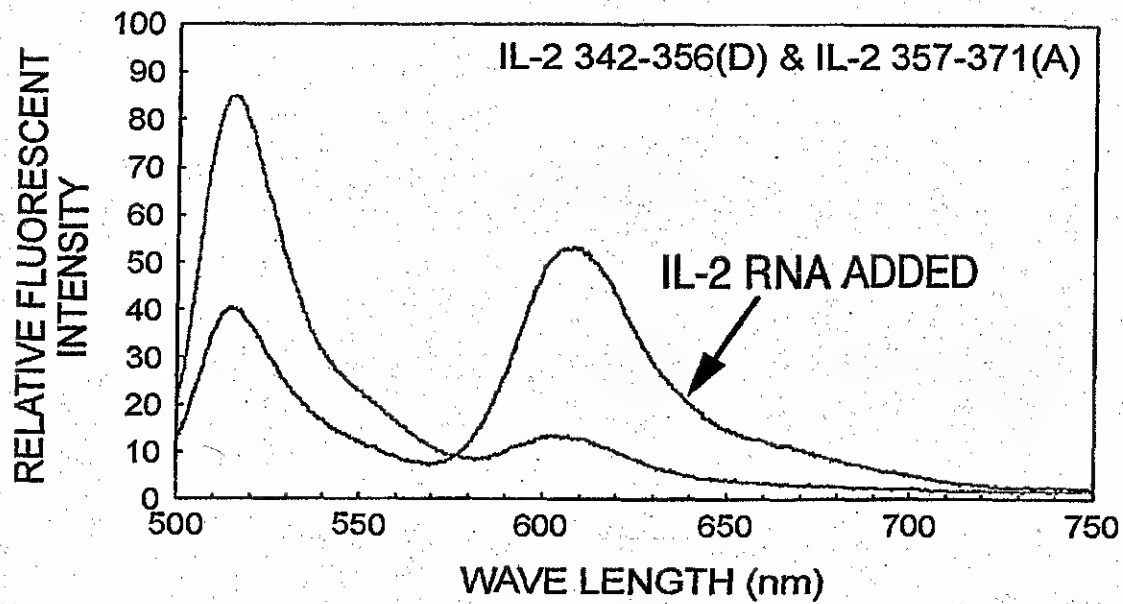


Fig.8

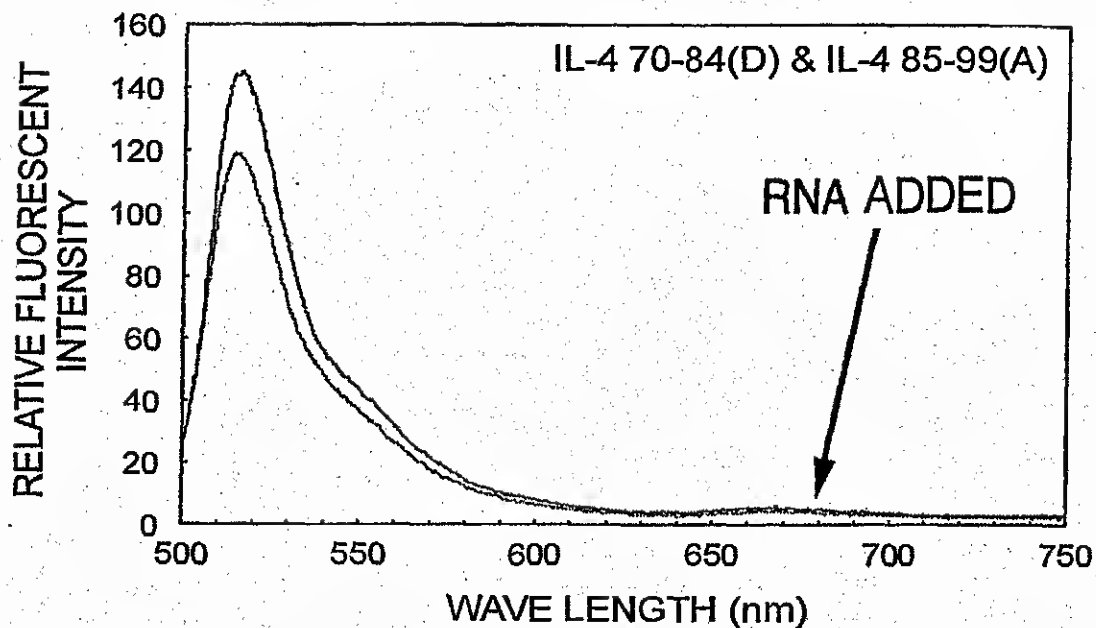


Fig.9

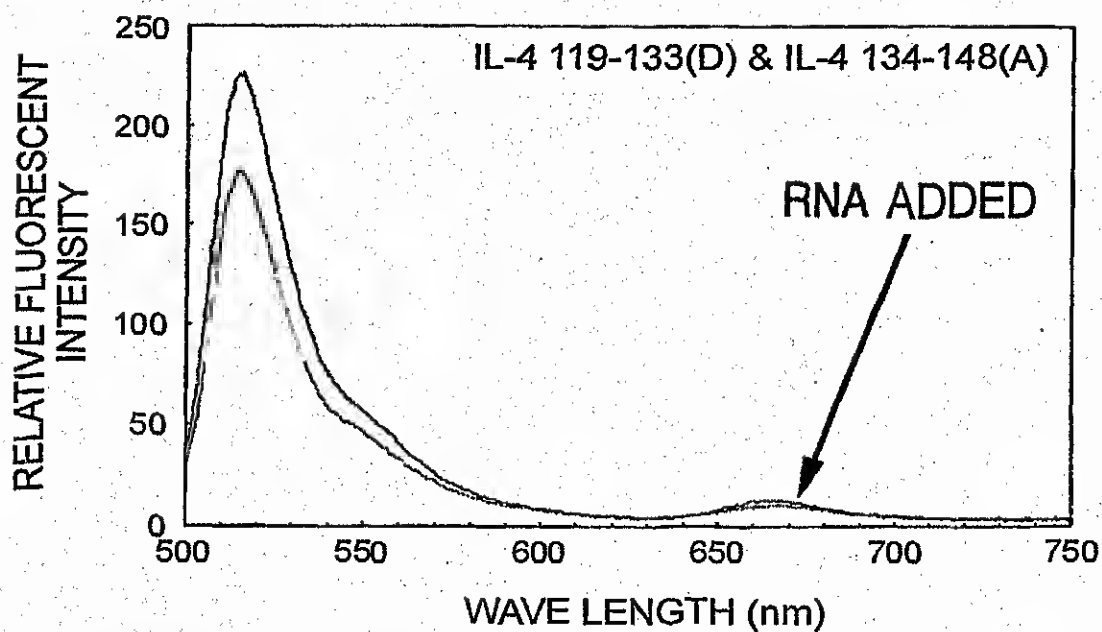


Fig.10

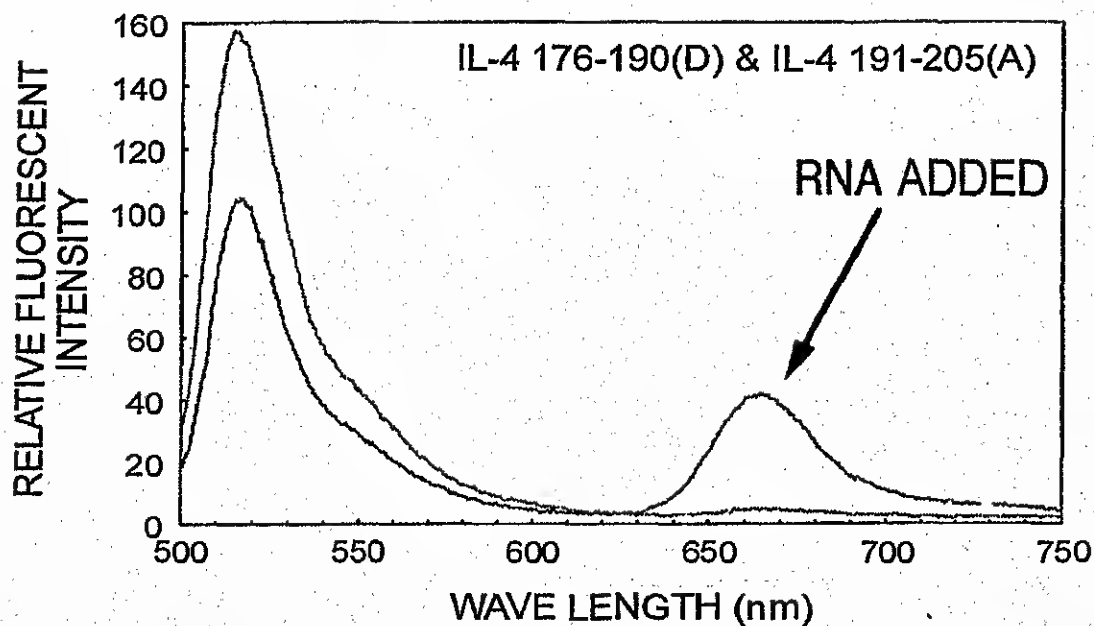


Fig.11

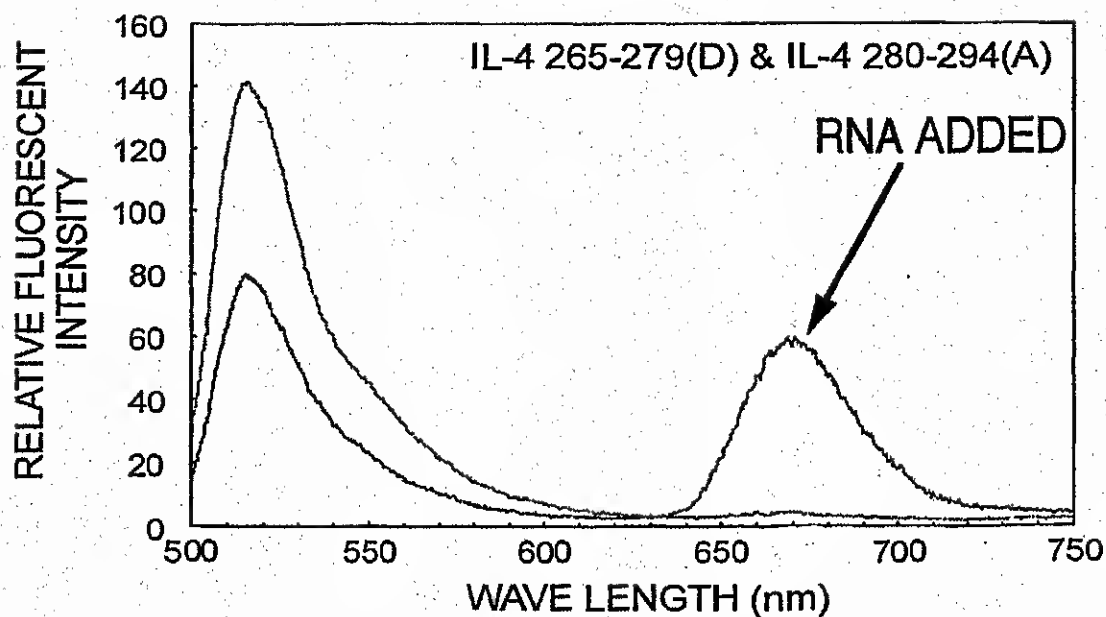


Fig.12

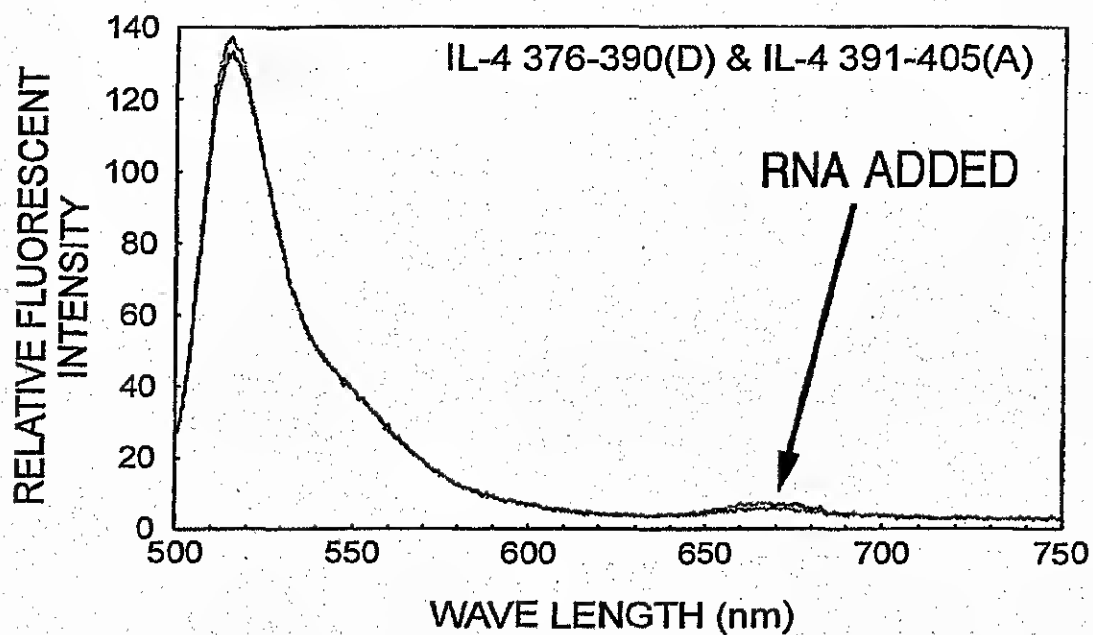
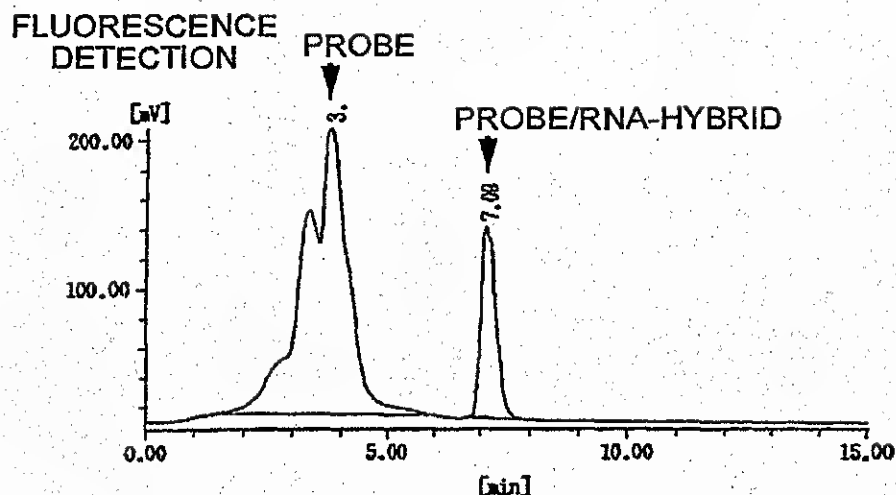


Fig.13

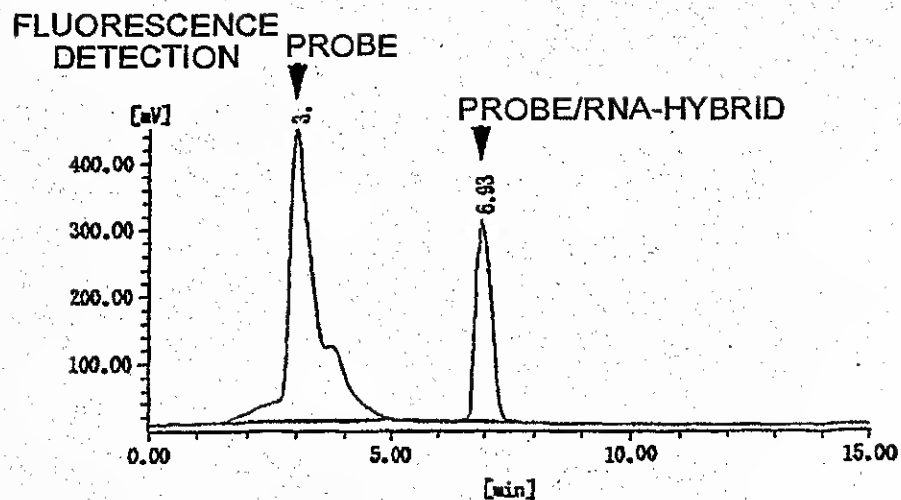
IL-2 342-356



RATIO OF AREAS 79.7% : 22.8%

Fig.14

IL-2 357-371



RATIO OF AREAS 72.7% : 27.3%

Fig.15

IL-4 119-133

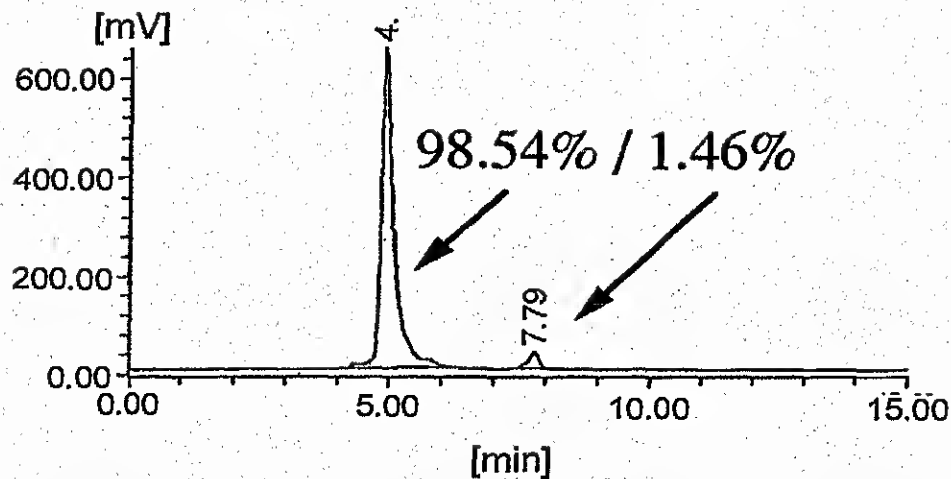


Fig.16

IL-4 134-148

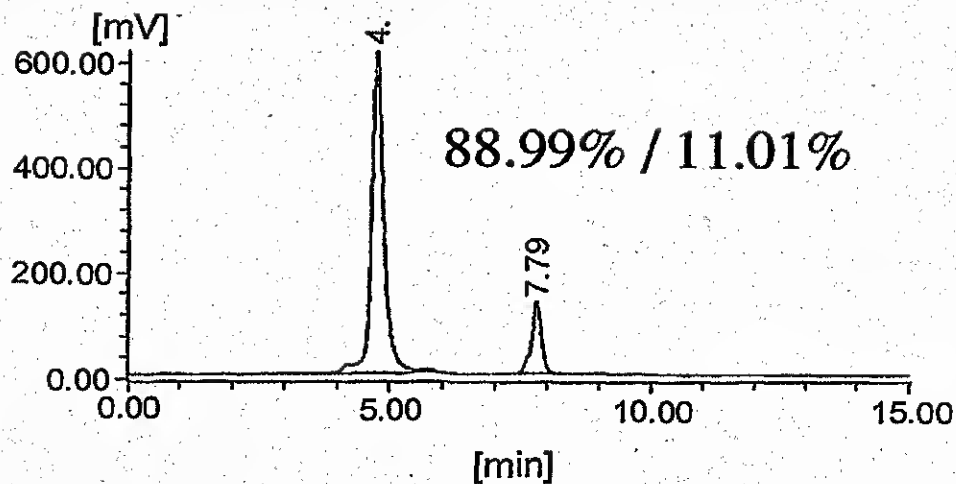


Fig.17

IL-4 265-279

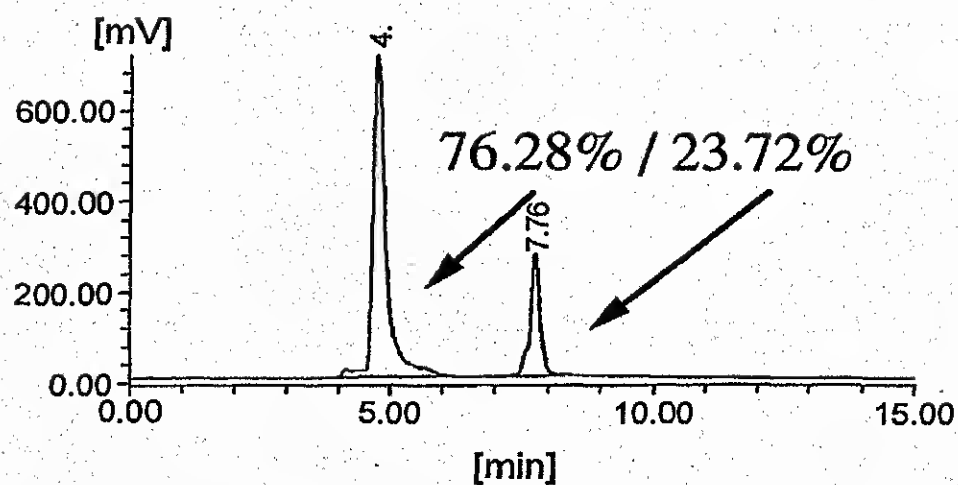


Fig.18

IL-4 280-294

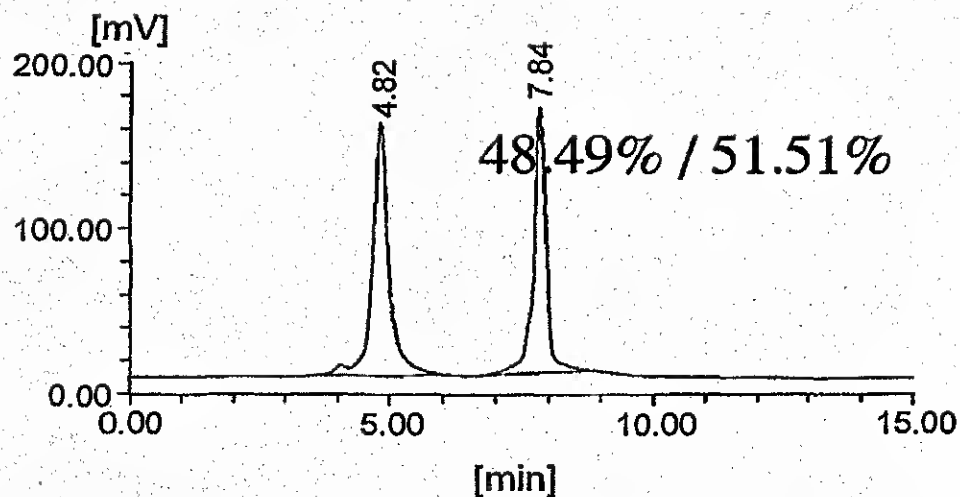
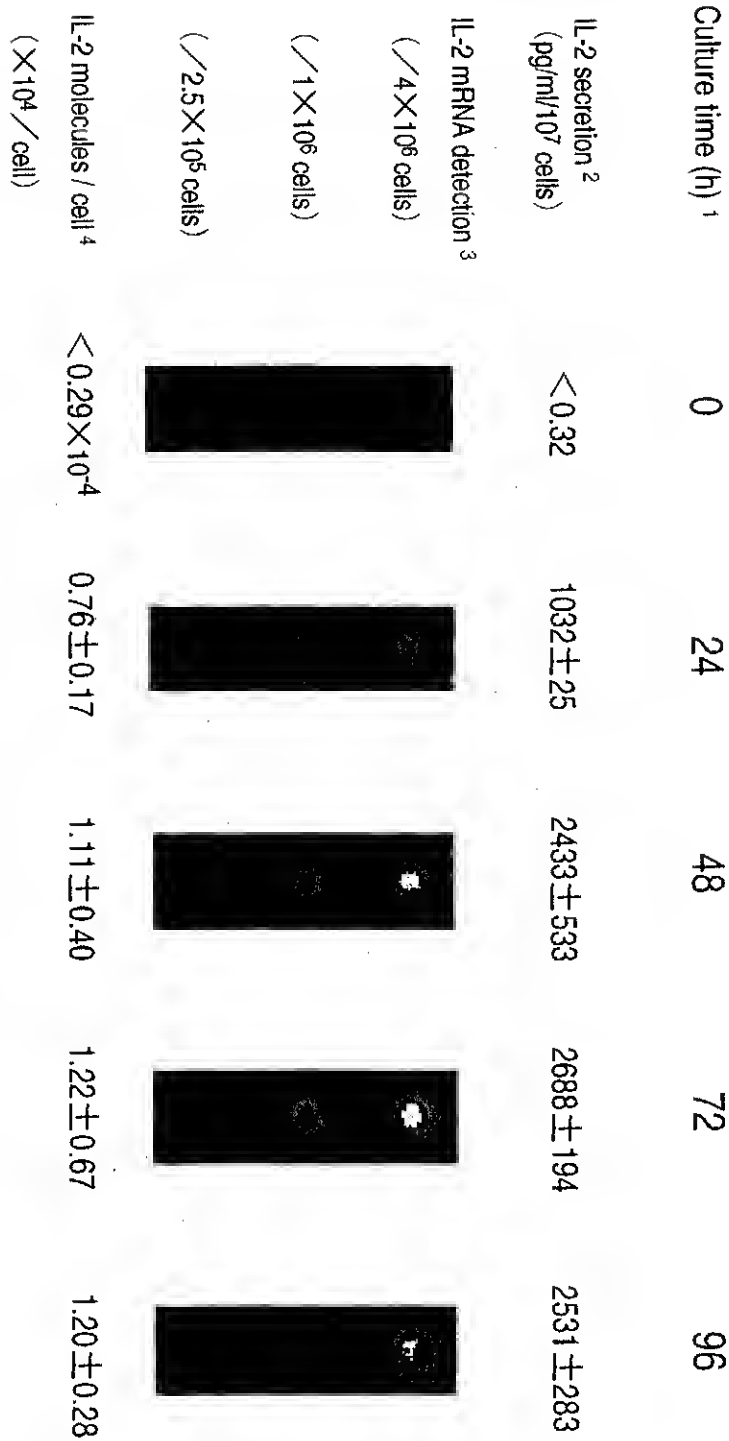


Fig. 19



¹ Time after adding 10 nM PMA, 0.5 mg/ml anti-human CD3 antibody and anti-human CD28 antibody to cultured Jurkat E6-1 cells

² The concentration of IL-2 in the culture supernatants measured by ELISA using anti-human IL-2 antibody

^{3, 4} Determination of cellular IL-2 expression level by dot blotting using RNA probe complementary to human IL-2 mRNA

Fig.20

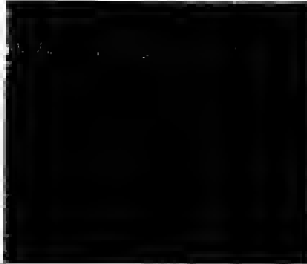





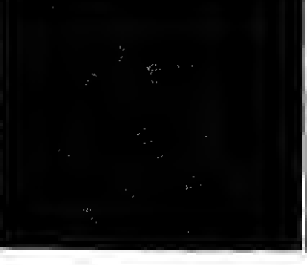
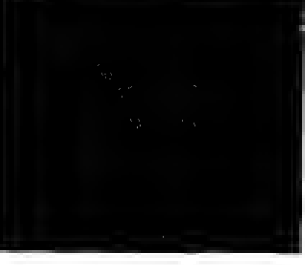
| DIG-11-dUTP & Reverse transcriptase | | IL-2 expression | |
|---|----------|--|---|
| Oligonucleotide | | (+) | (-) |
| none | none |  |  |
| none | none |  |  |
| added | oligo dA |  |  |
| added | oligo dT |  |  |

Fig. 21

| PROBE | IL-2 EXPRESSION | | | |
|-----------------|-----------------|--|-------|--|
| | (+) | | (-) | |
| IL-2 228-242(D) | | | | |
| IL-2 243-257(A) | | | | |
| IL-2 198-212(D) | | | | |
| IL-2 213-227(A) | | | | |
| IL-2 77-91(D) | | | | |
| IL-2 92-106(A) | | | | |
| IL-2 287-301(D) | | | | |
| IL-2 302-316(A) | | | | |
| IL-2 342-356(D) | | | | |
| IL-2 357-371(A) | | | | |
| NONE | | | | |

Fig.22

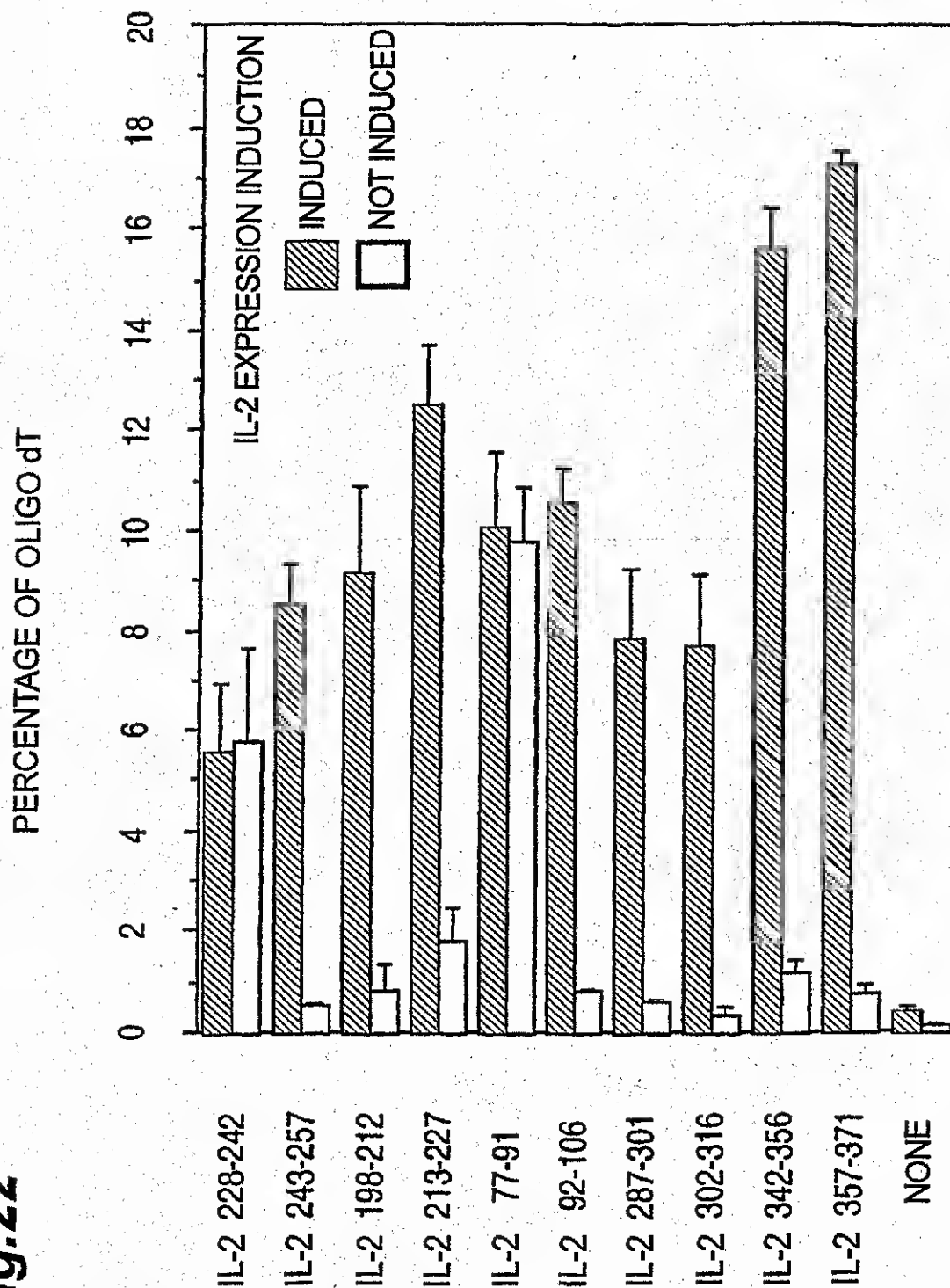


Fig. 23

| PROBE | IL-2 EXPRESSION | | | | | |
|---|-----------------|-----|-----|-----|-----|-----|
| | (+) | | | (-) | | |
| IL-2 228-242(D) & IL-2 243-257(A) | D/A | A/A | D/D | D/A | A/A | D/D |
| | | | | | | |
| IL-2 198-212(D) & IL-2 213-227(A) | | | | | | |
| | | | | | | |
| IL-2 77-91(D) & IL-2 92-106(A) | | | | | | |
| | | | | | | |
| IL-2 287-301(D) & IL-2 302-316(A) | | | | | | |
| | | | | | | |
| IL-2 342-356(D) & IL-2 357-371(A) | | | | | | |
| | | | | | | |
| NONE & NONE | | | | | | |
| | | | | | | |

Fig. 24

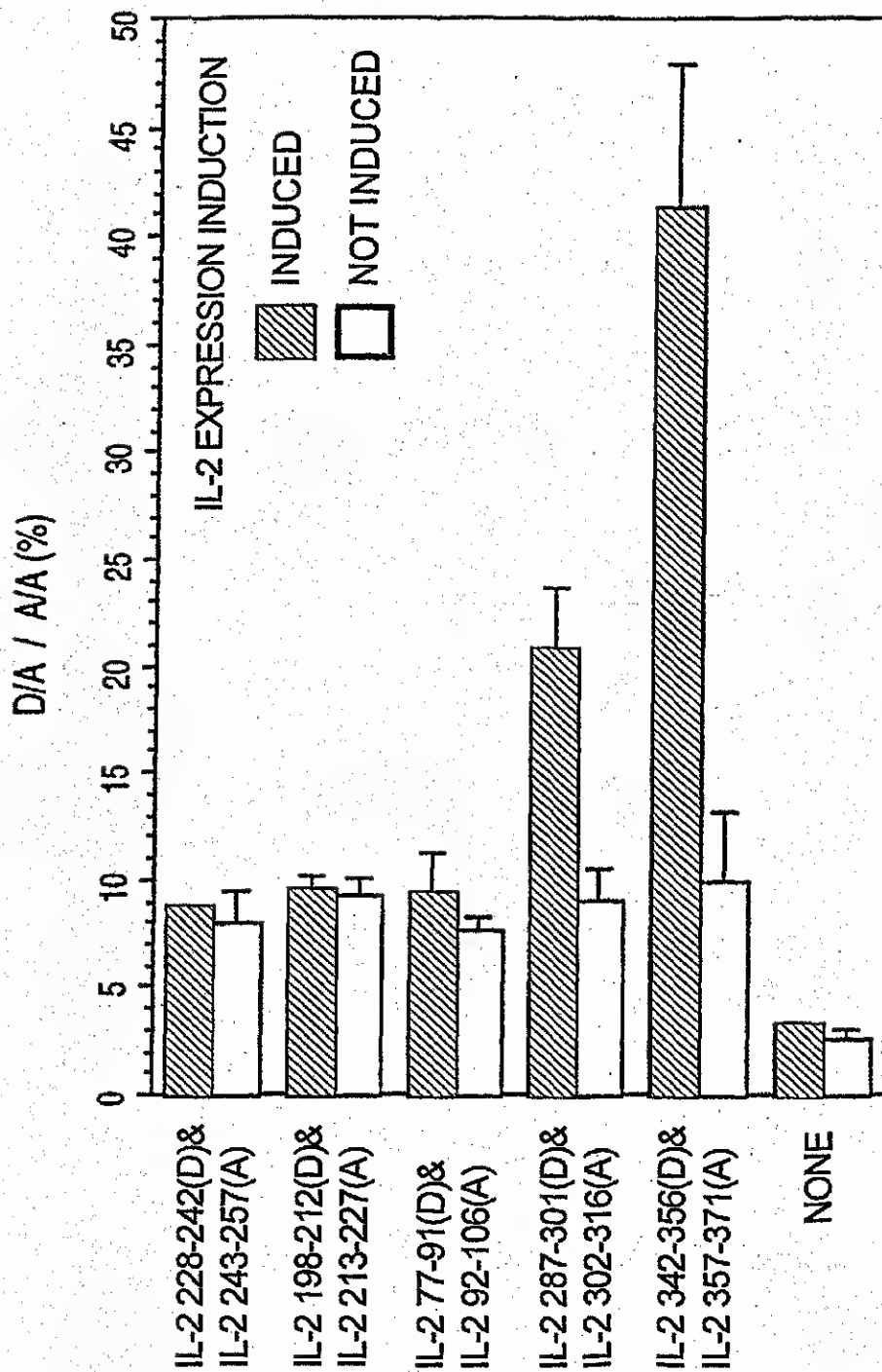


Fig. 25

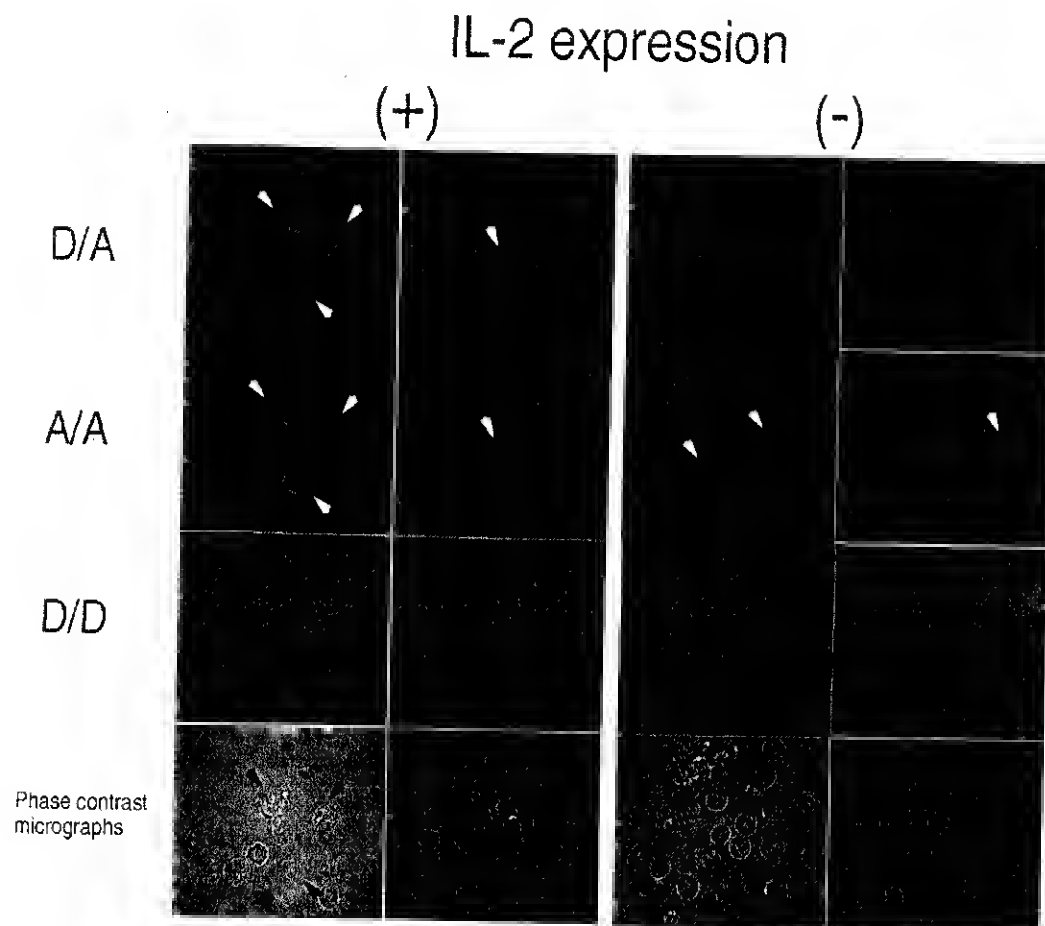


Fig.26

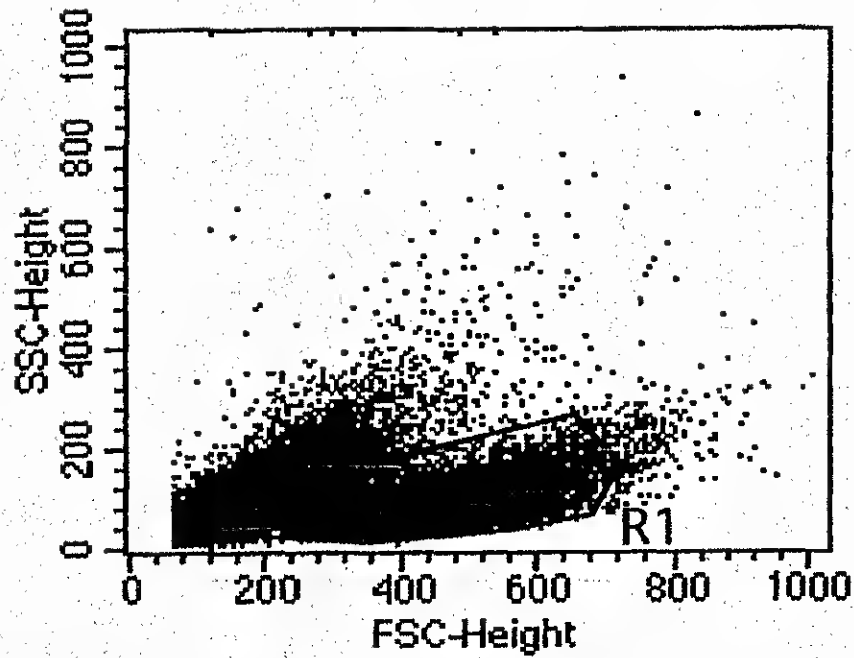


Fig.27

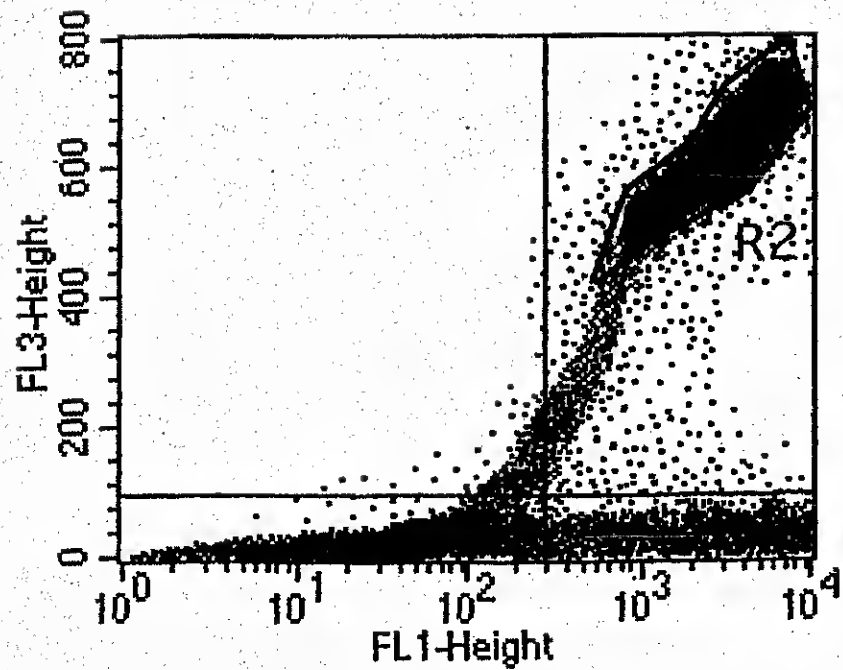


Fig.28

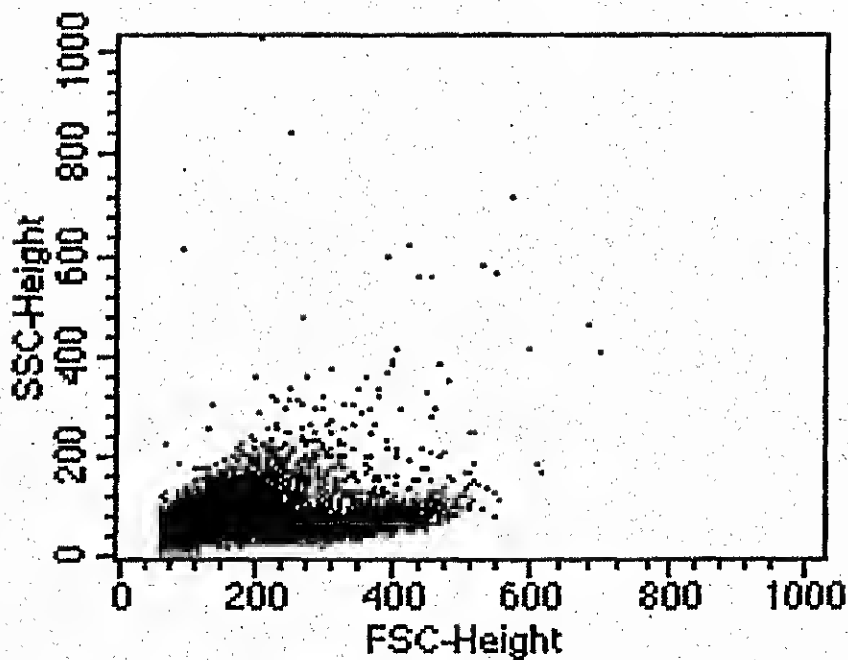


Fig.29

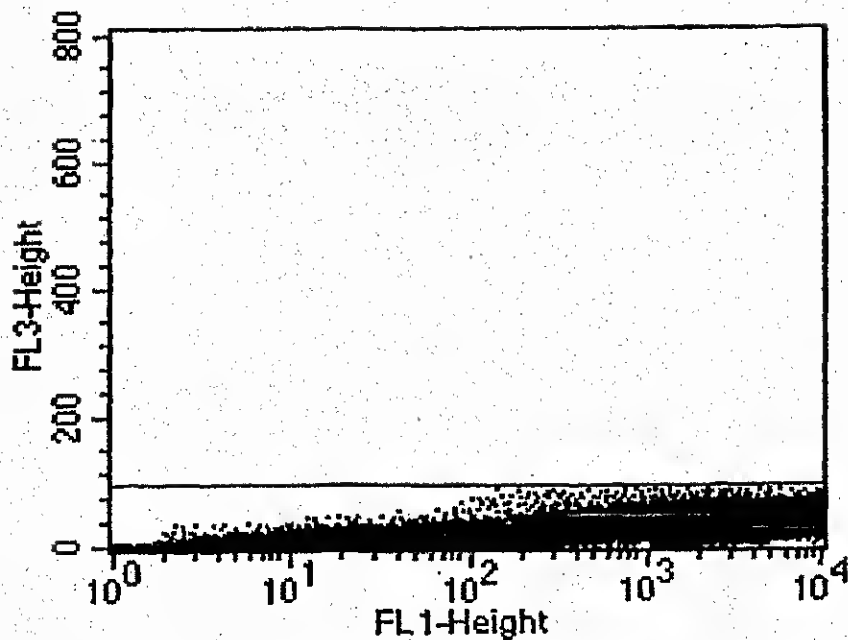


Fig.30

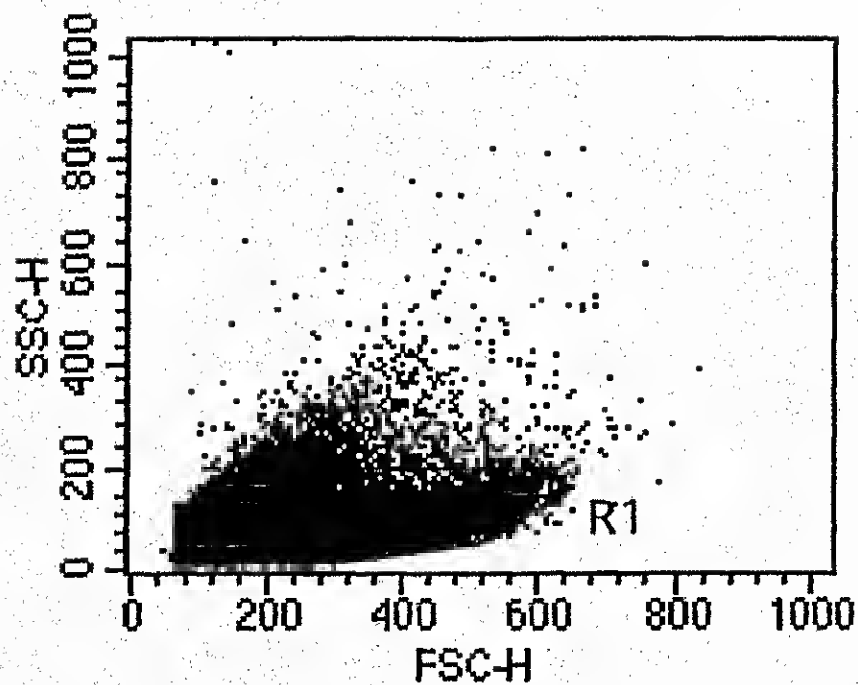


Fig.31

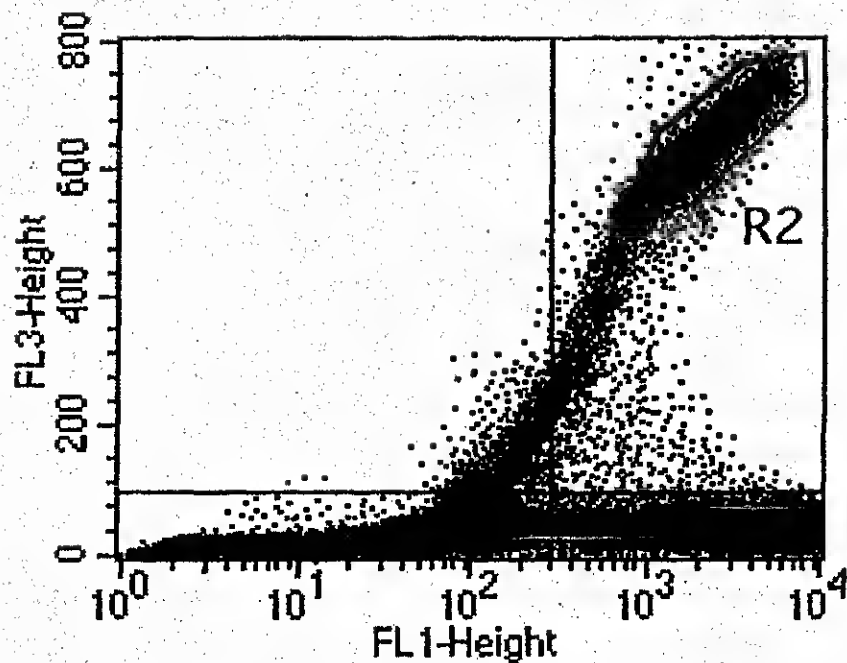


Fig.32

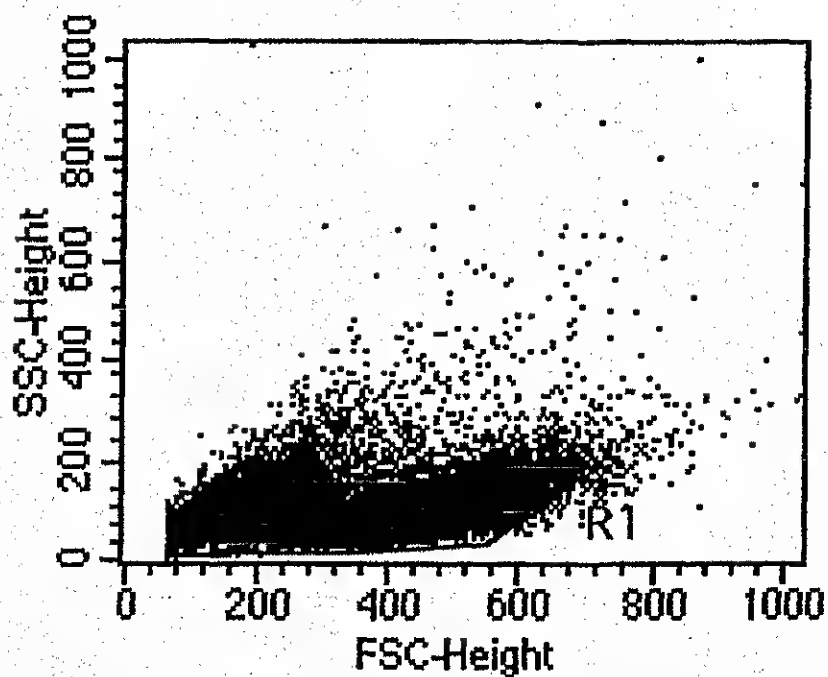


Fig.33

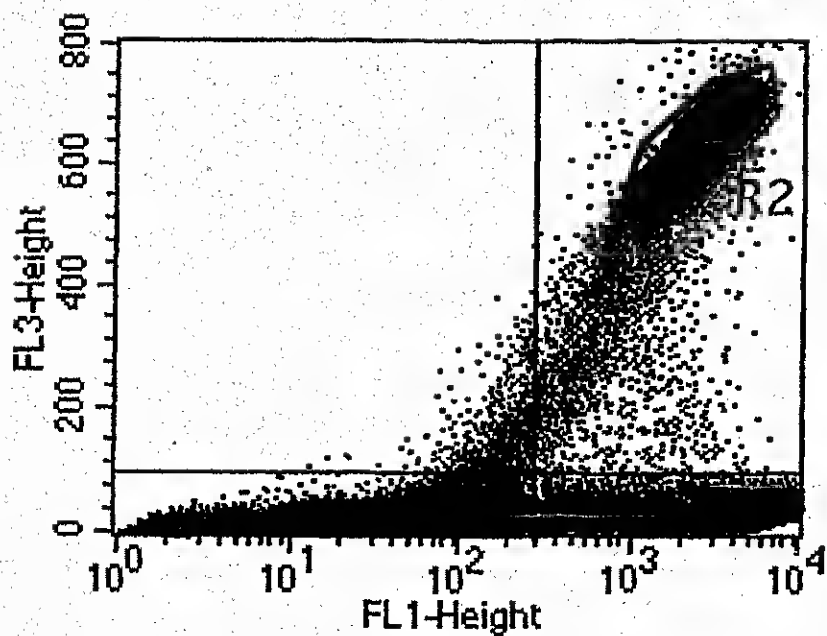


Fig.34

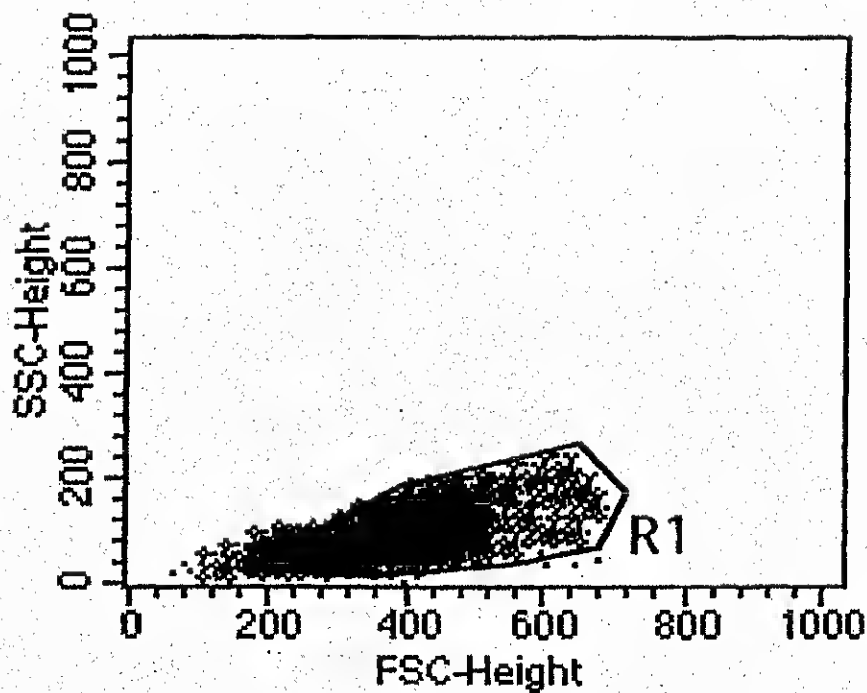


Fig.35

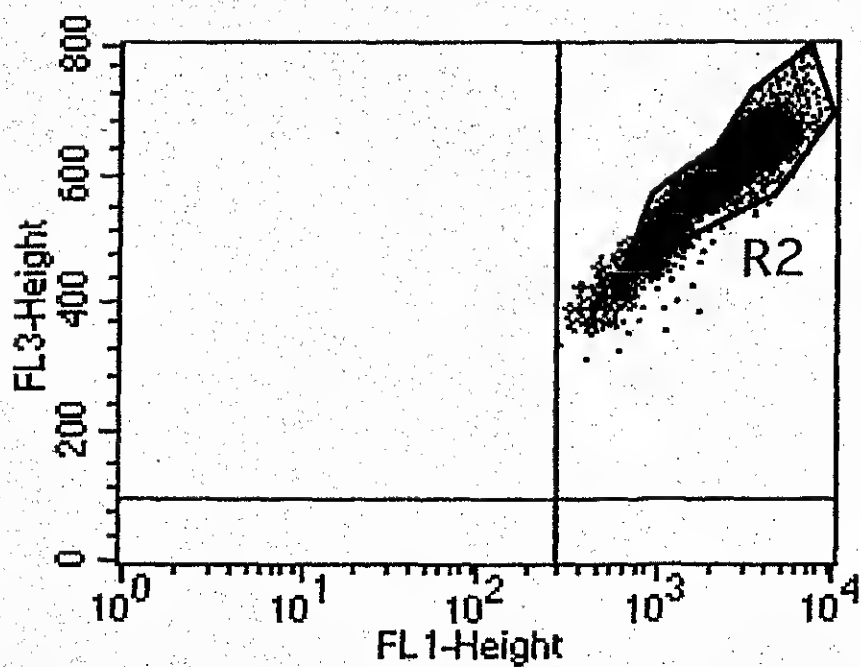


Fig.36

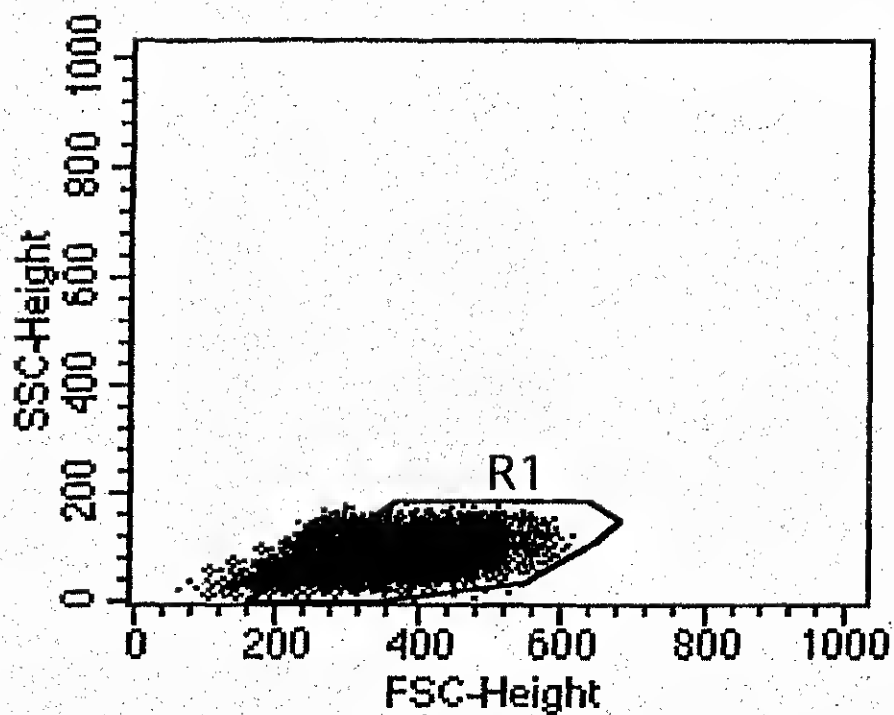


Fig.37

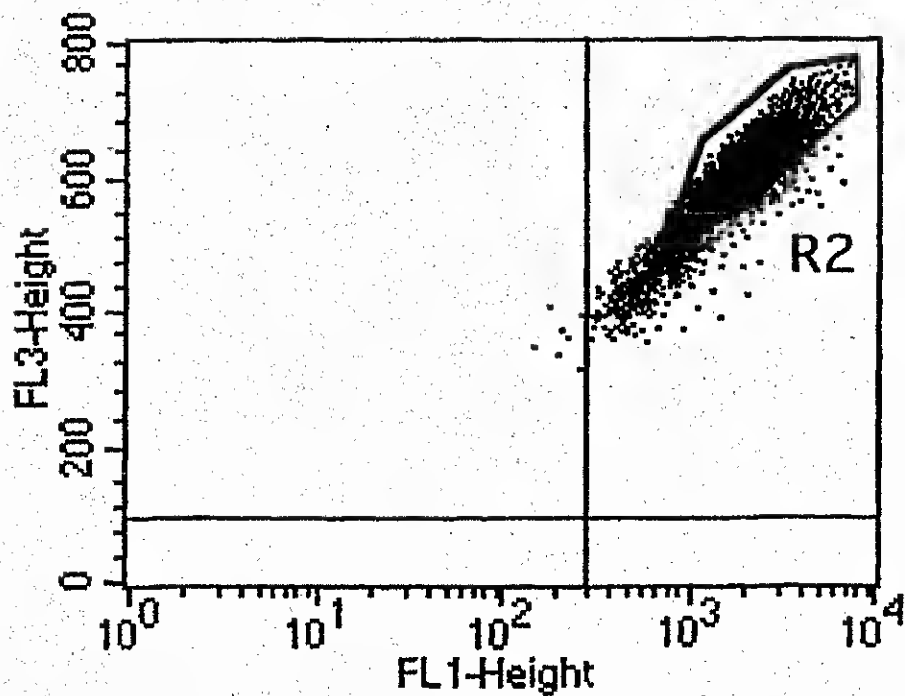


Fig.38

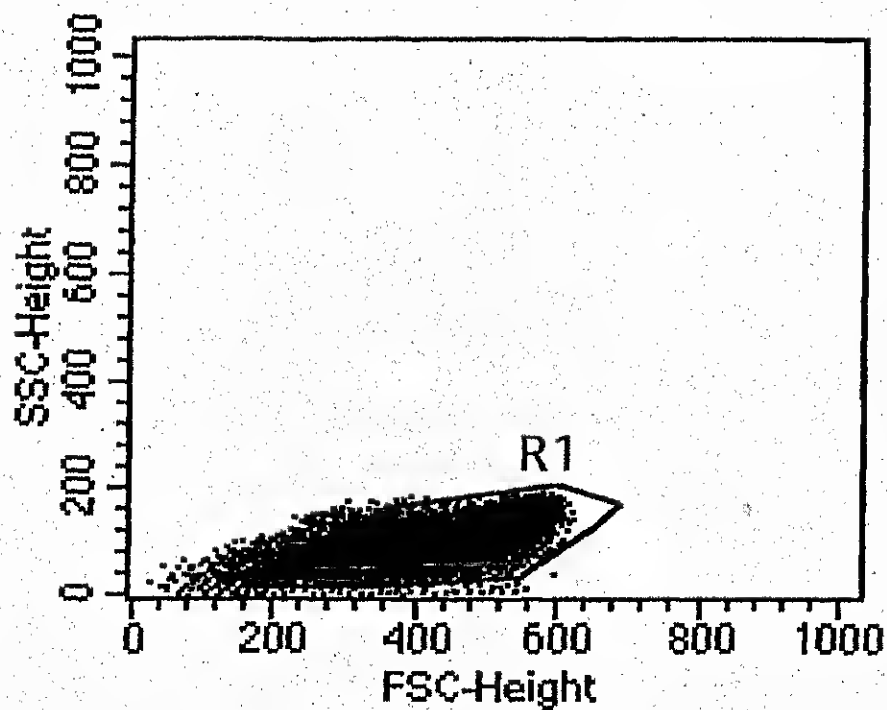


Fig.39

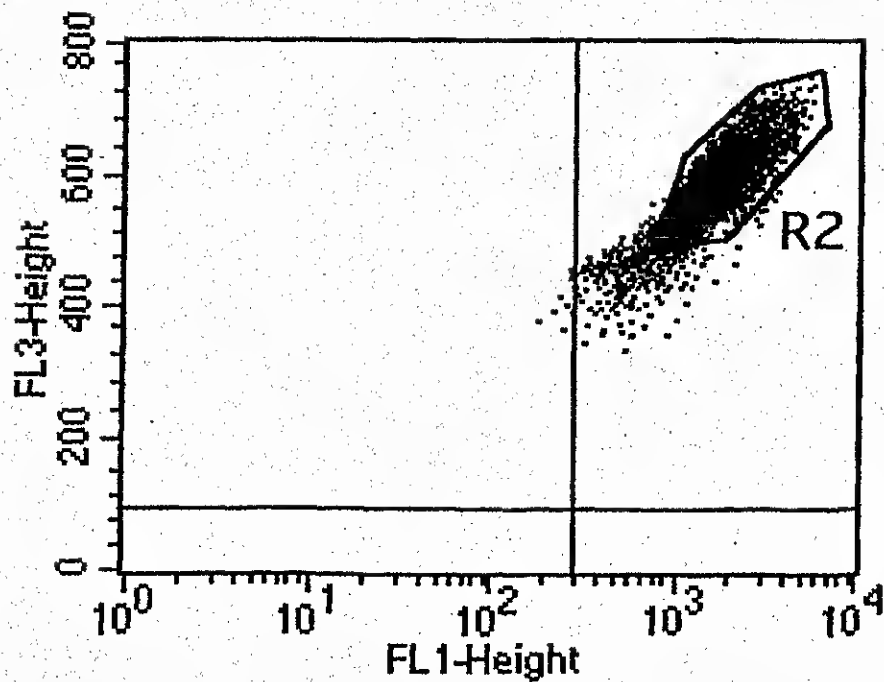


Fig.40

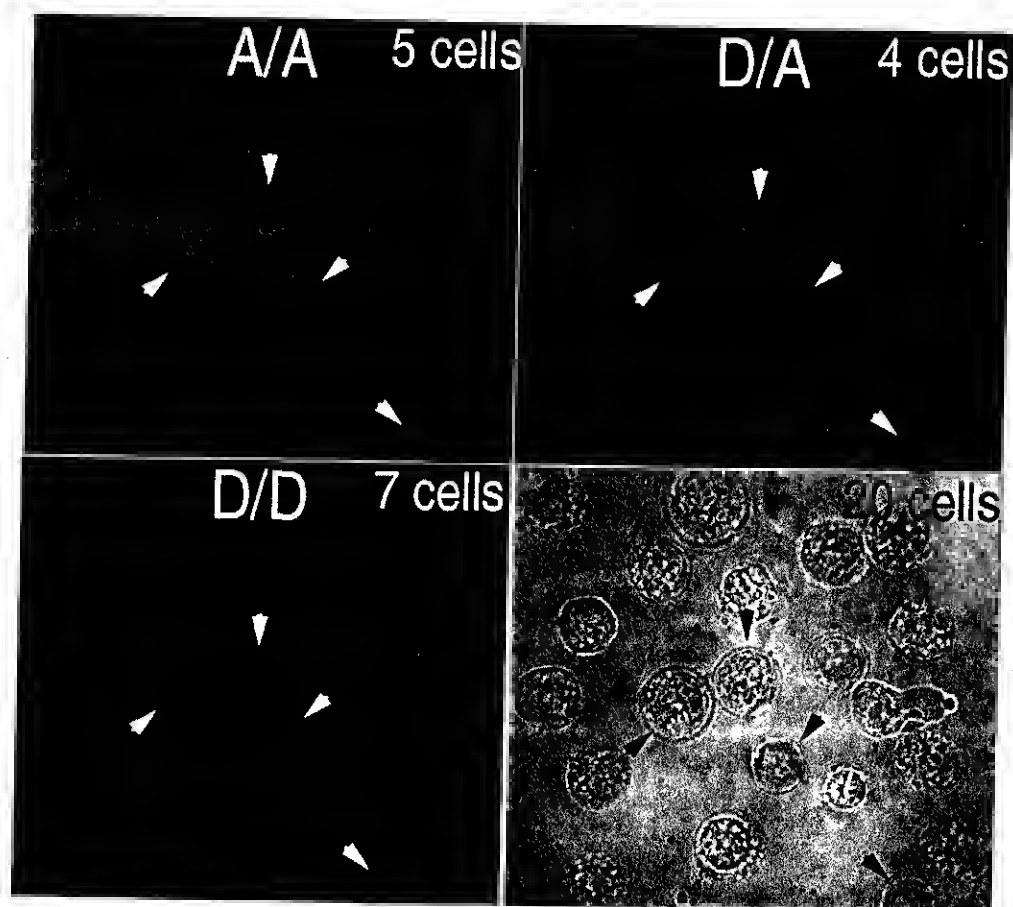


Fig.41

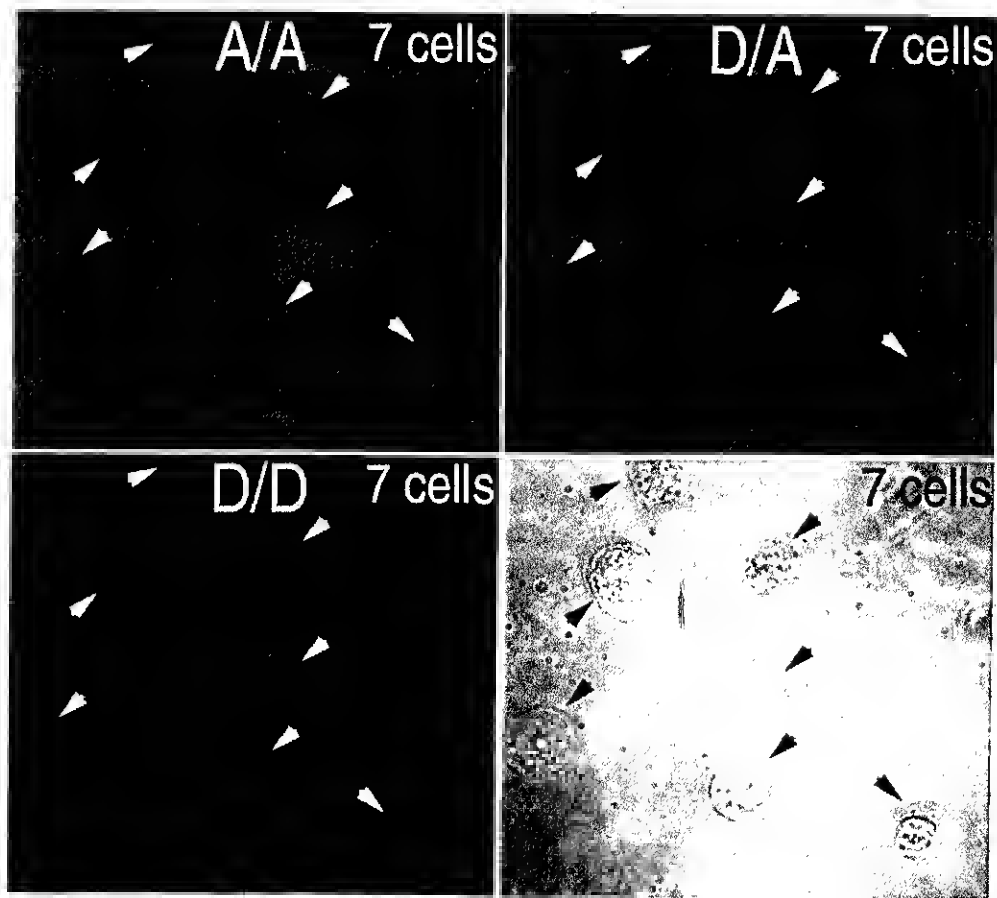


Fig.42

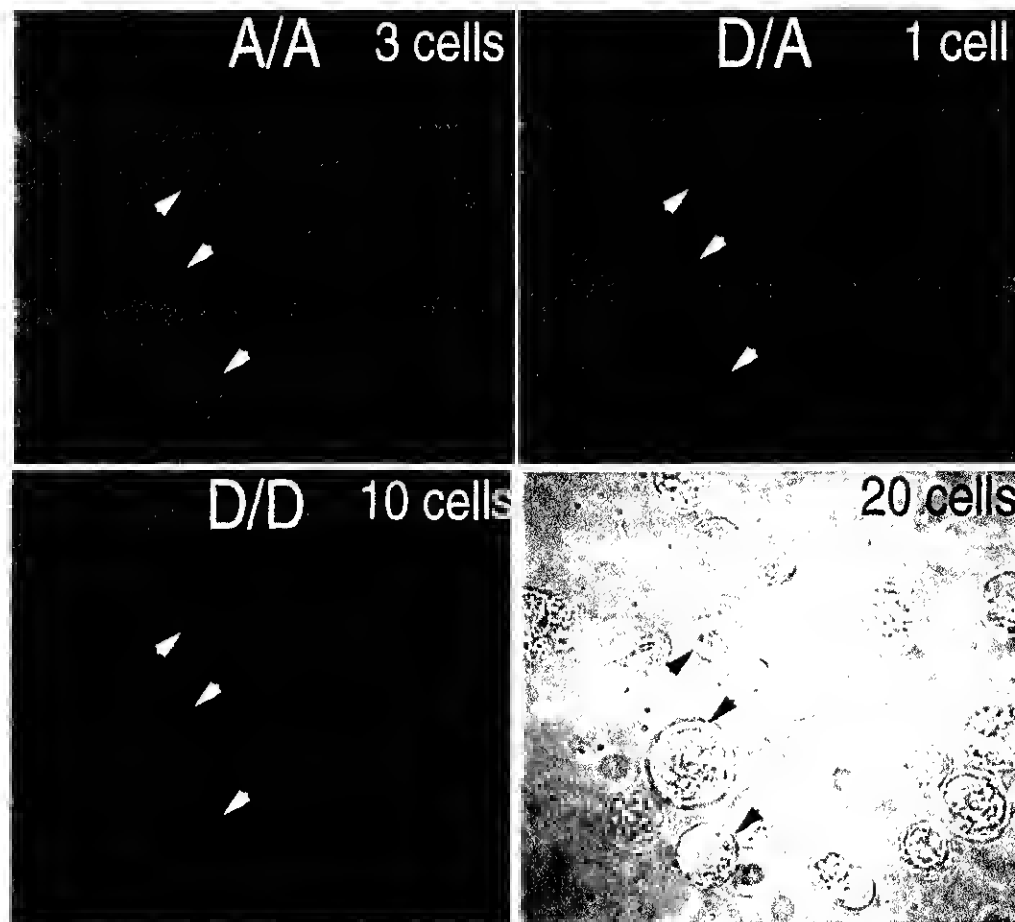


Fig.43

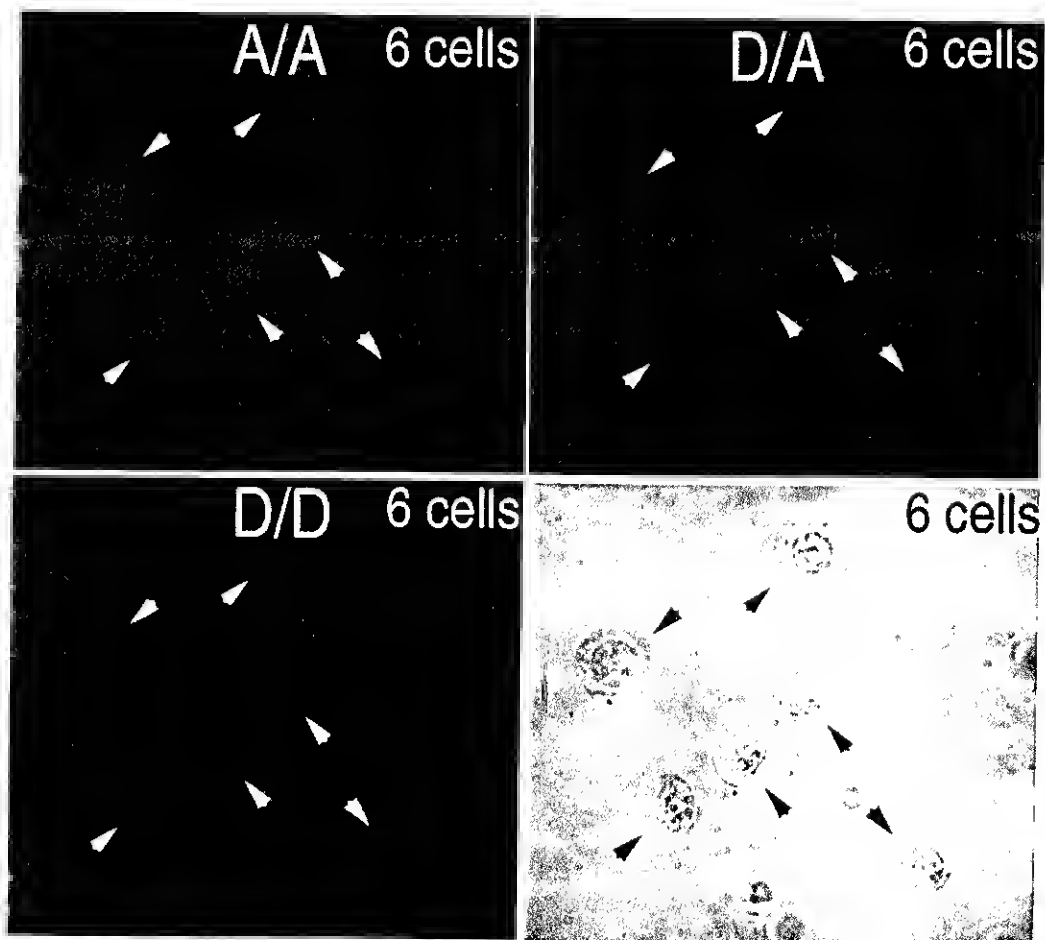


Fig.44

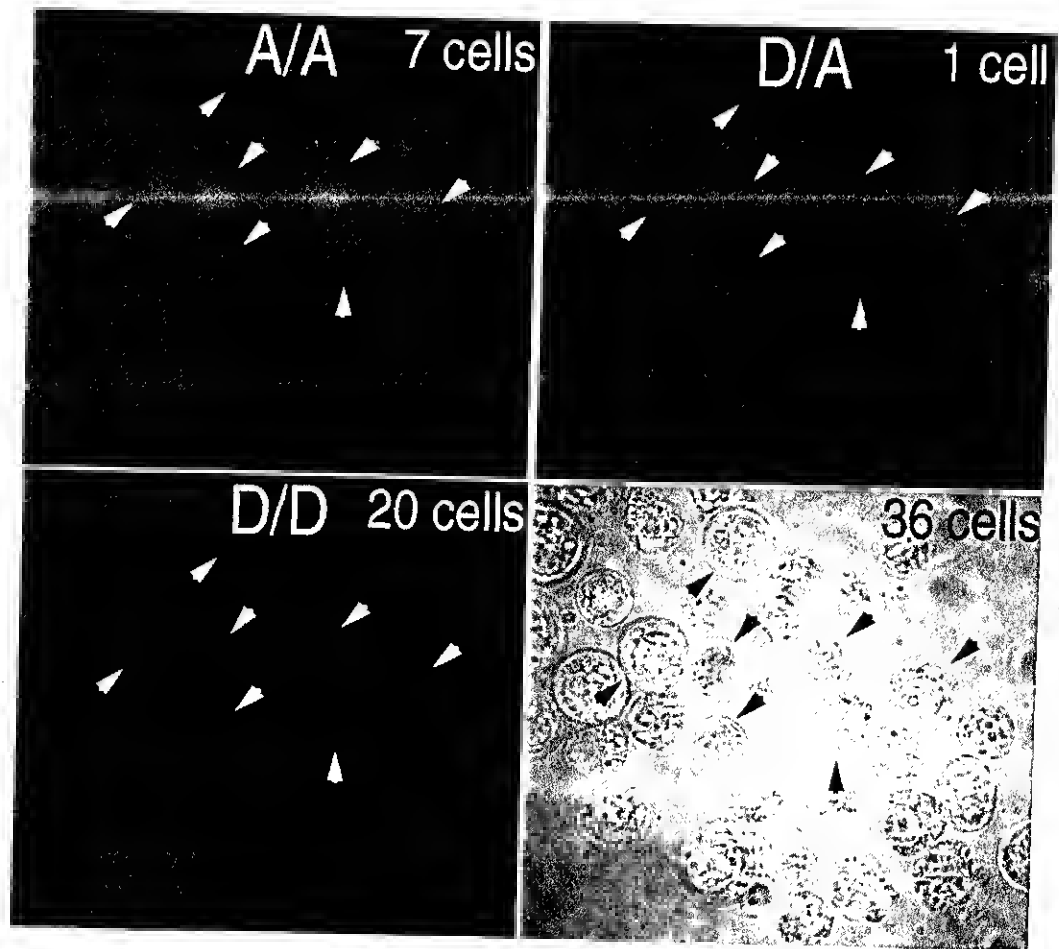


Fig.45

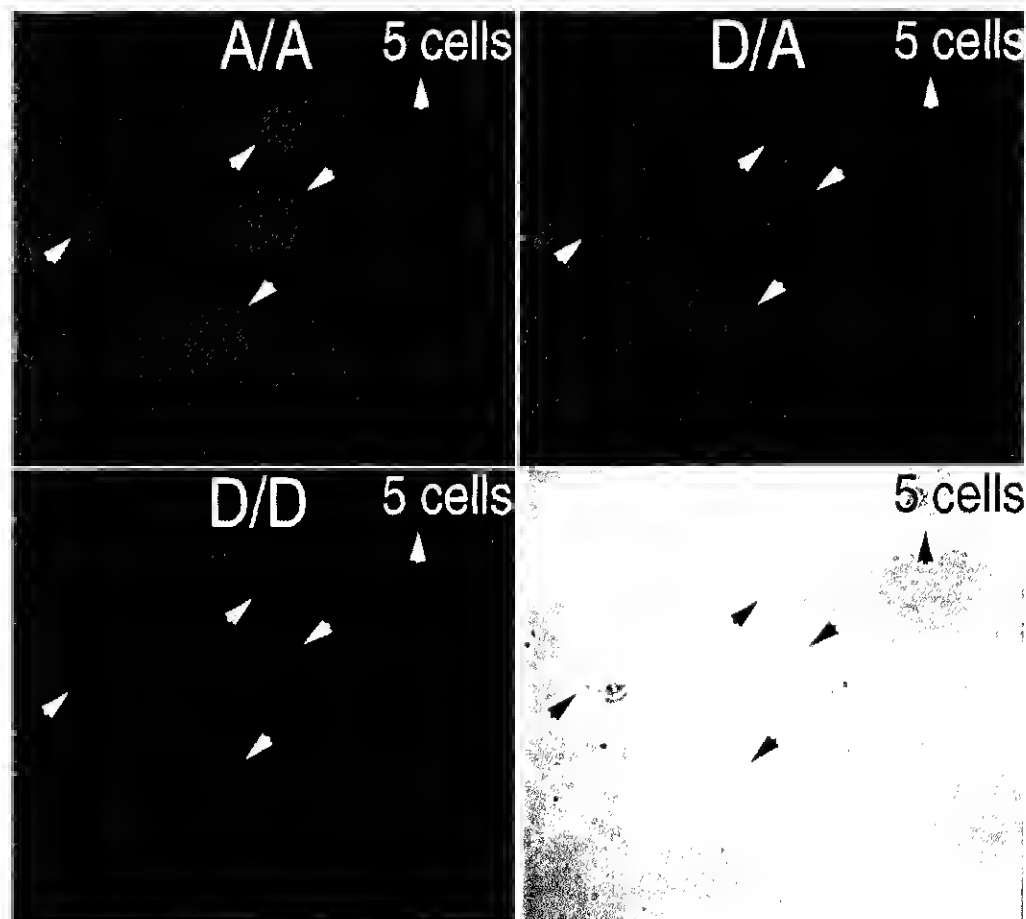


Fig.46

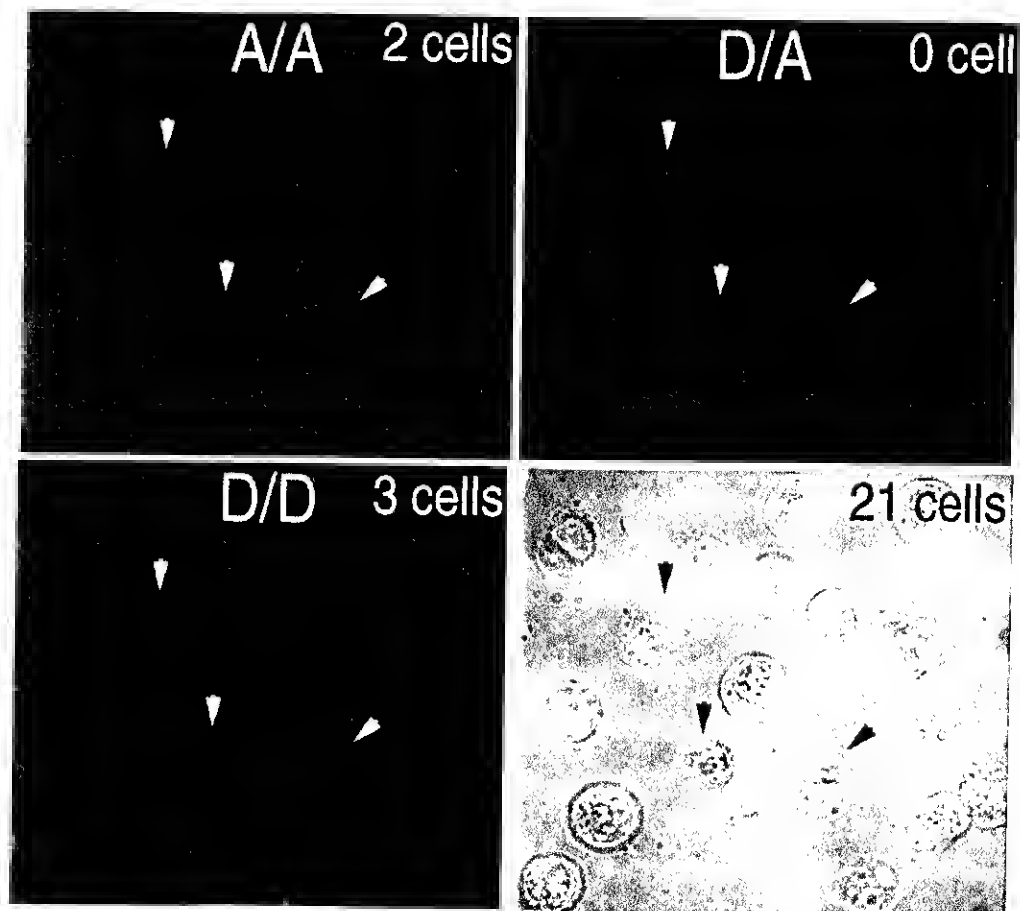
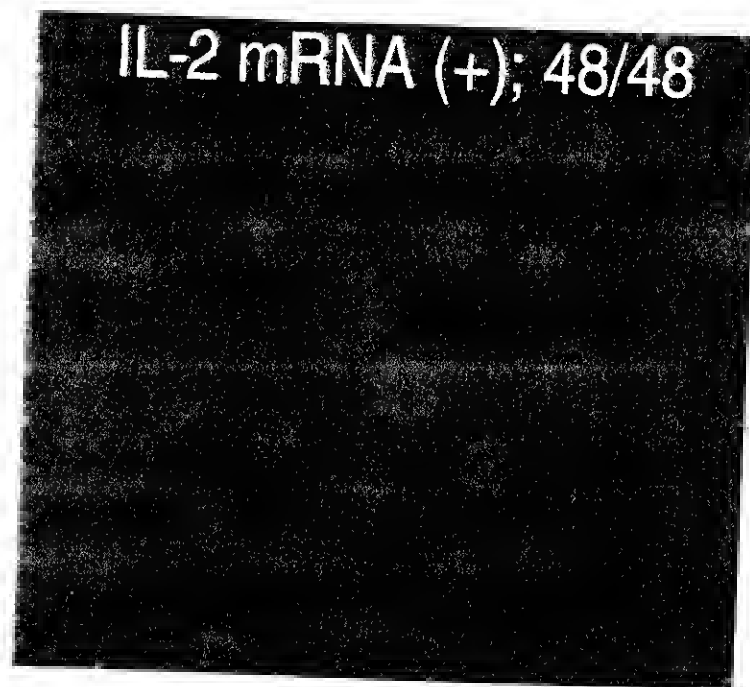


Fig.47



Inventors: ISHIBASHI et al.
Attorney Docket No.: 400684/SOEI
Leydig, Voit & Mayer, Ltd.
202-737-6770

Fig. 48

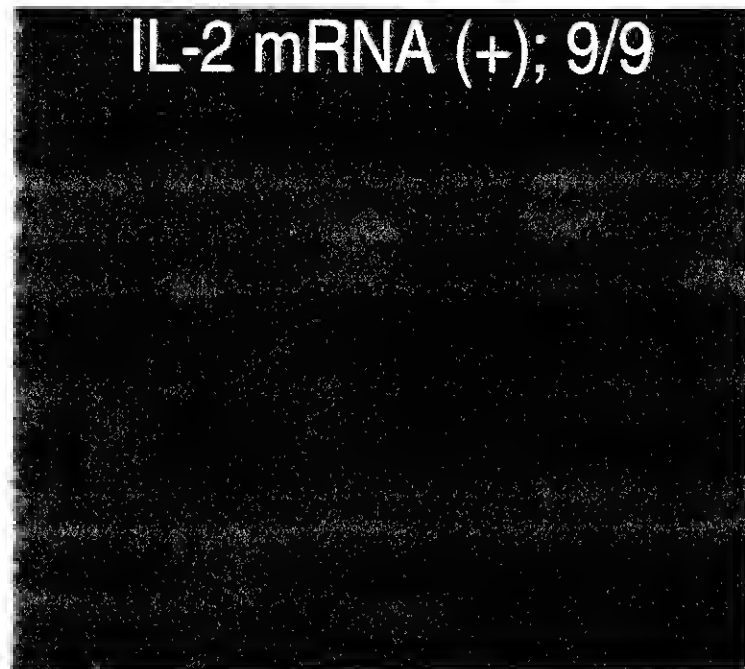


Fig.49

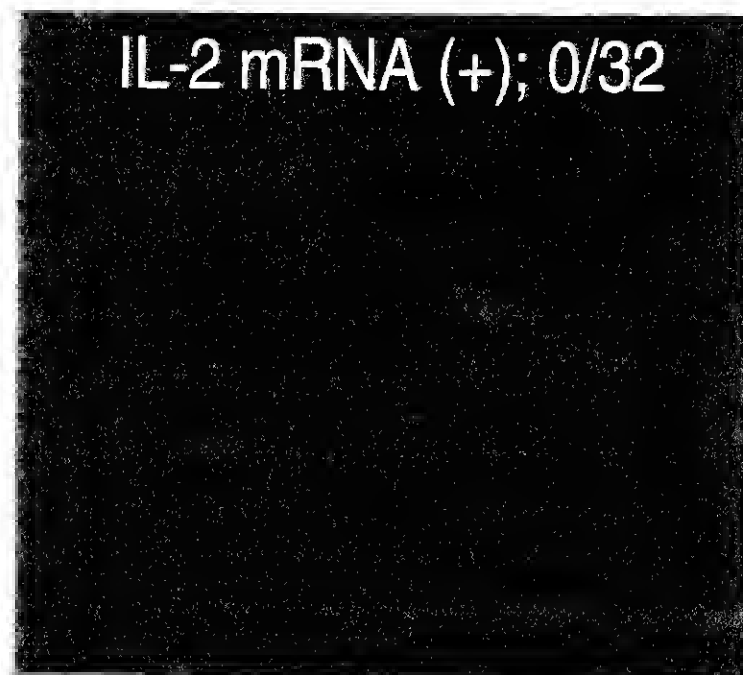


Fig.50

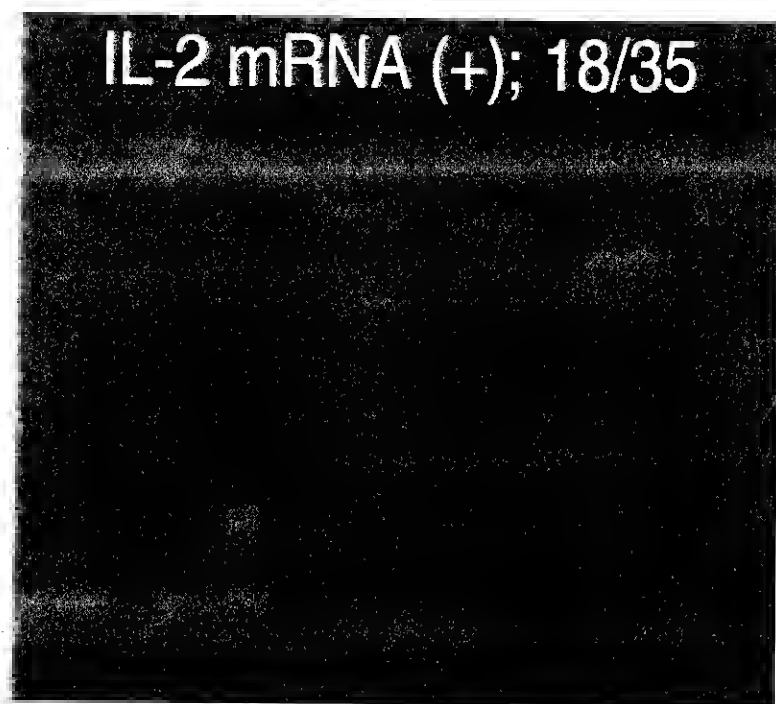


Fig.51



Fig.52

IL-2 mRNA (+); 8/39



Fig.53

IL-2 mRNA (+); 8/8



202-737-6770

Fig.54

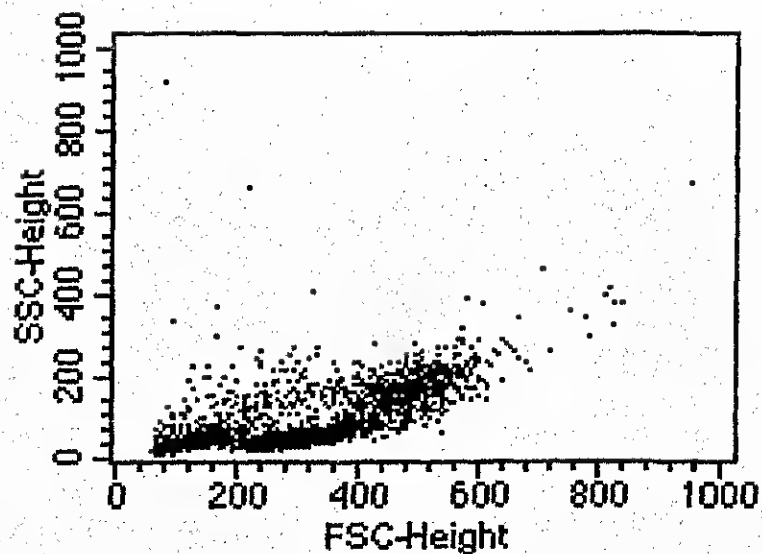


Fig.55

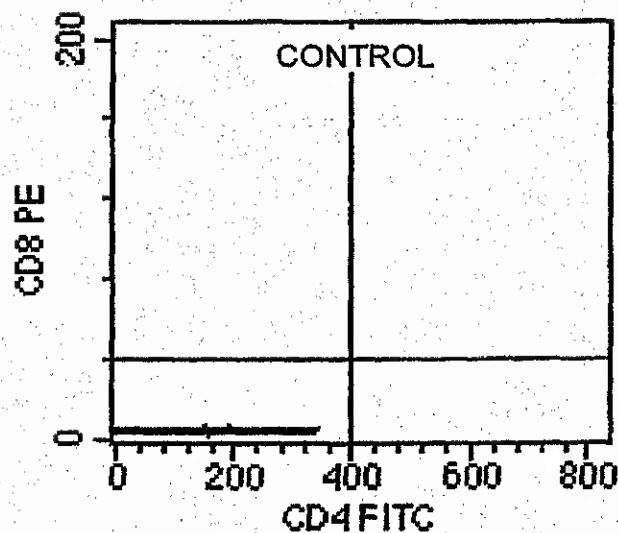


Fig.56

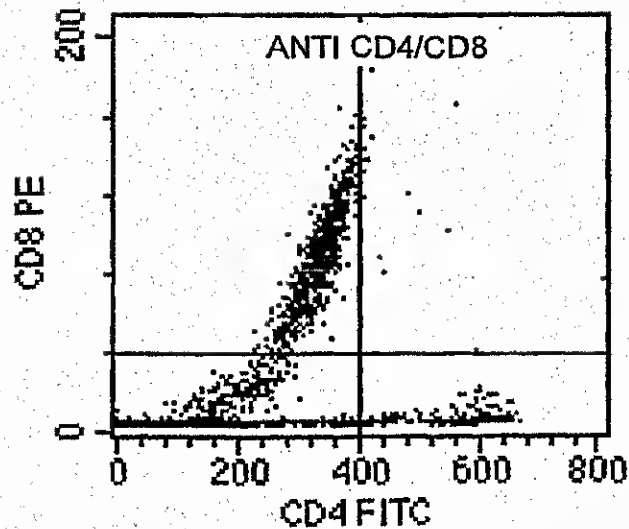


Fig.57

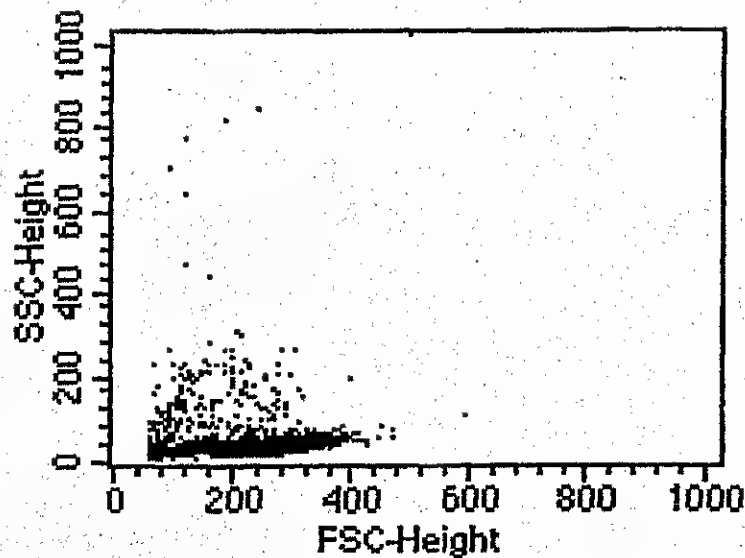


Fig.58

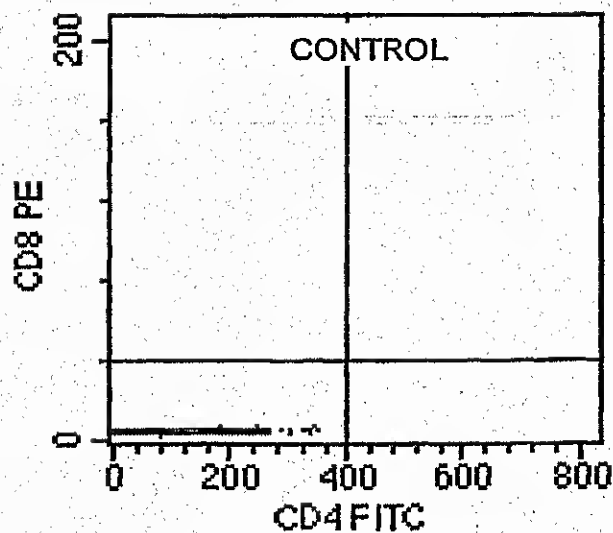


Fig.59

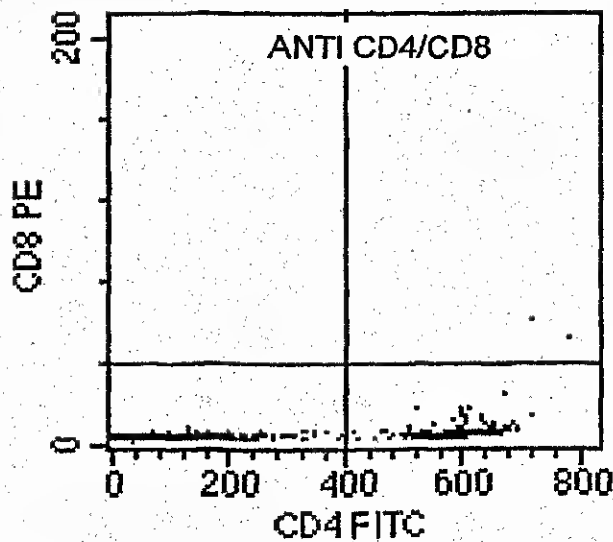


Fig.60

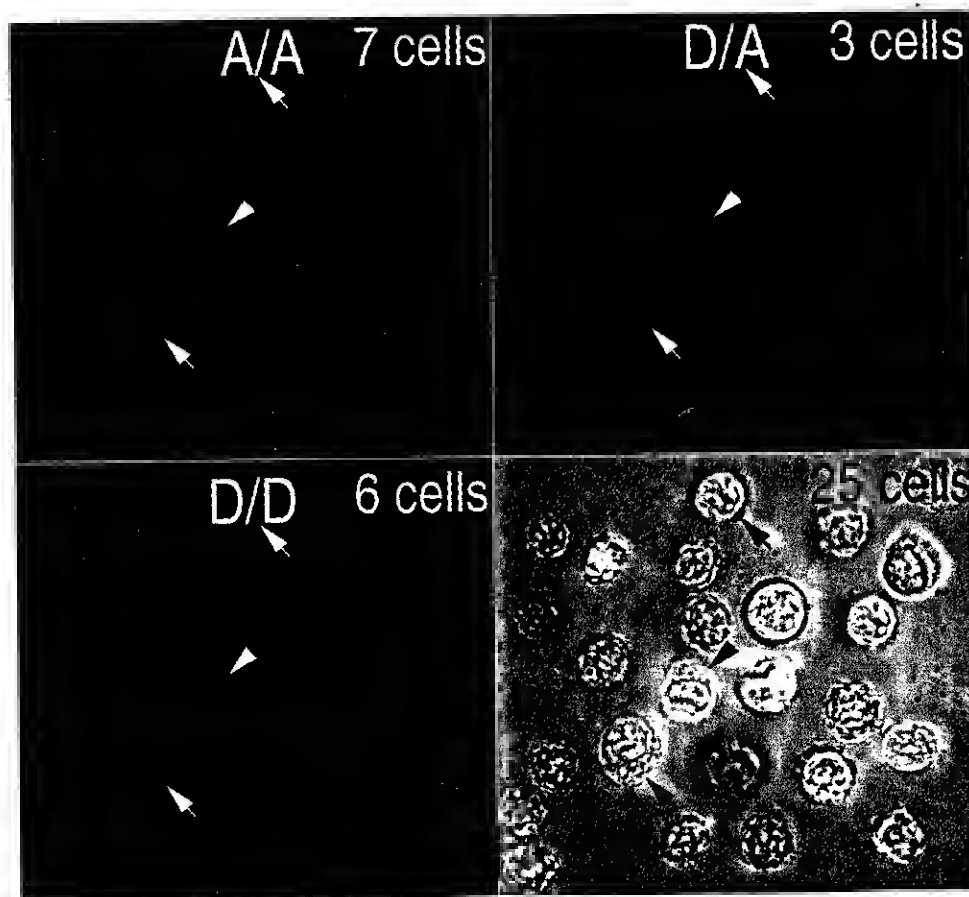


Fig.61

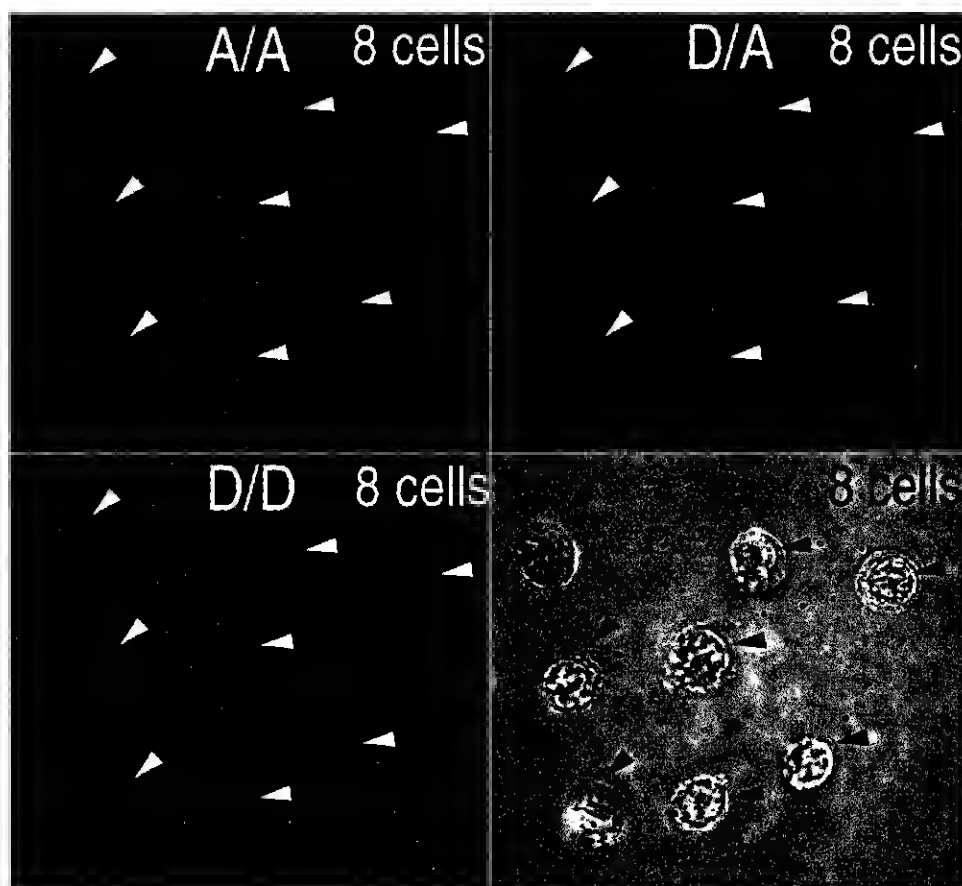


Fig.62

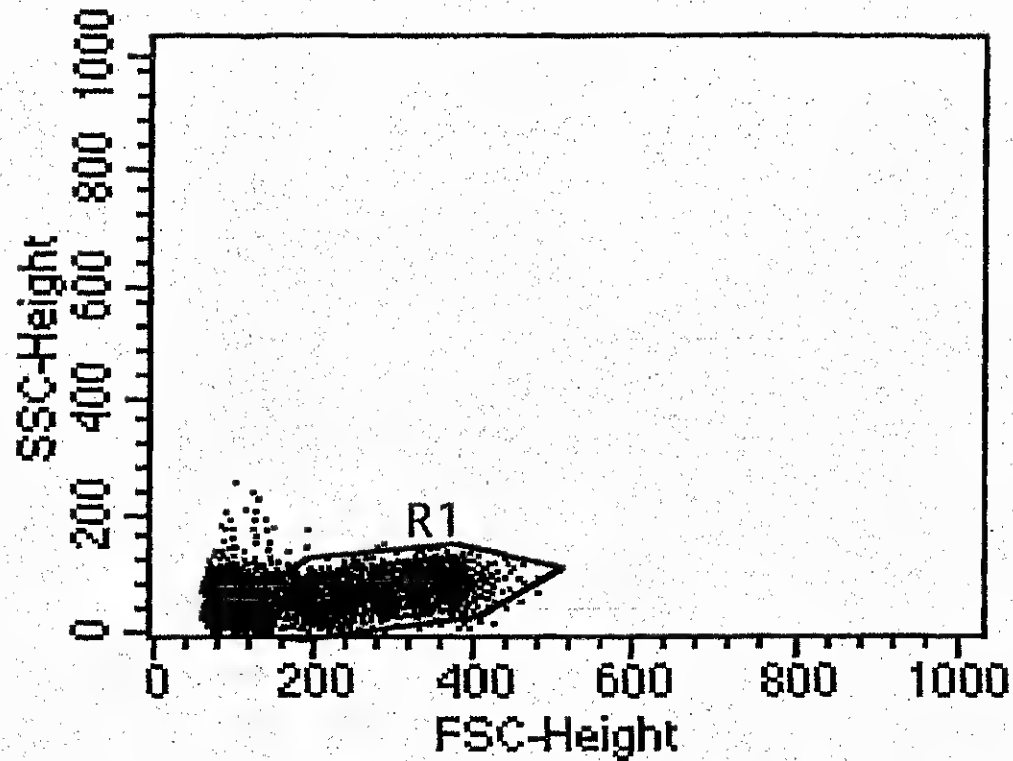


Fig.63

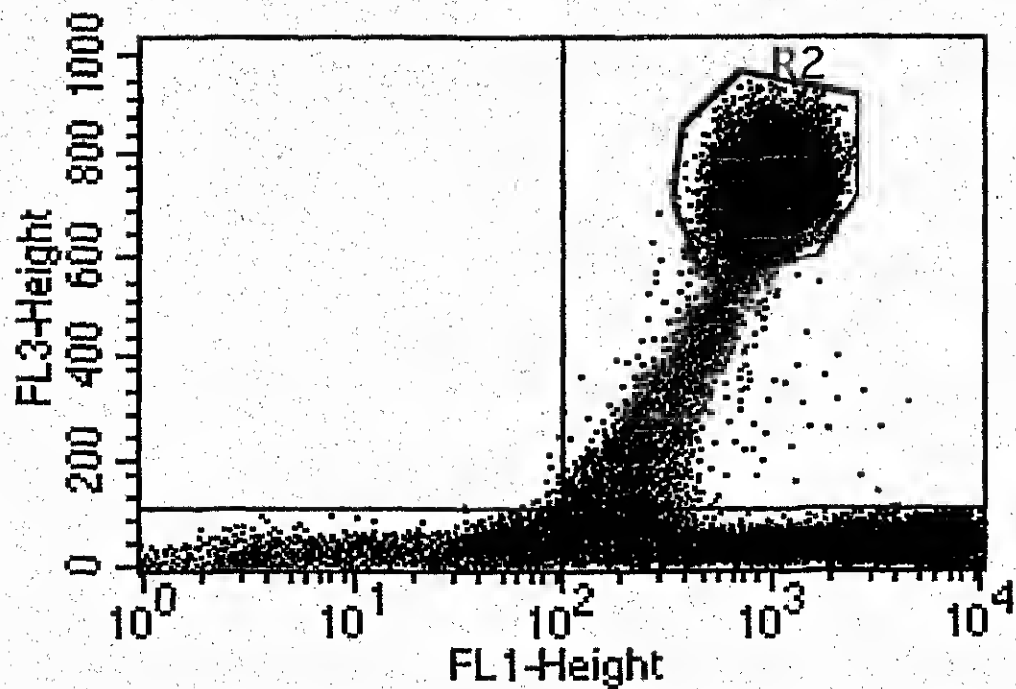


Fig.64

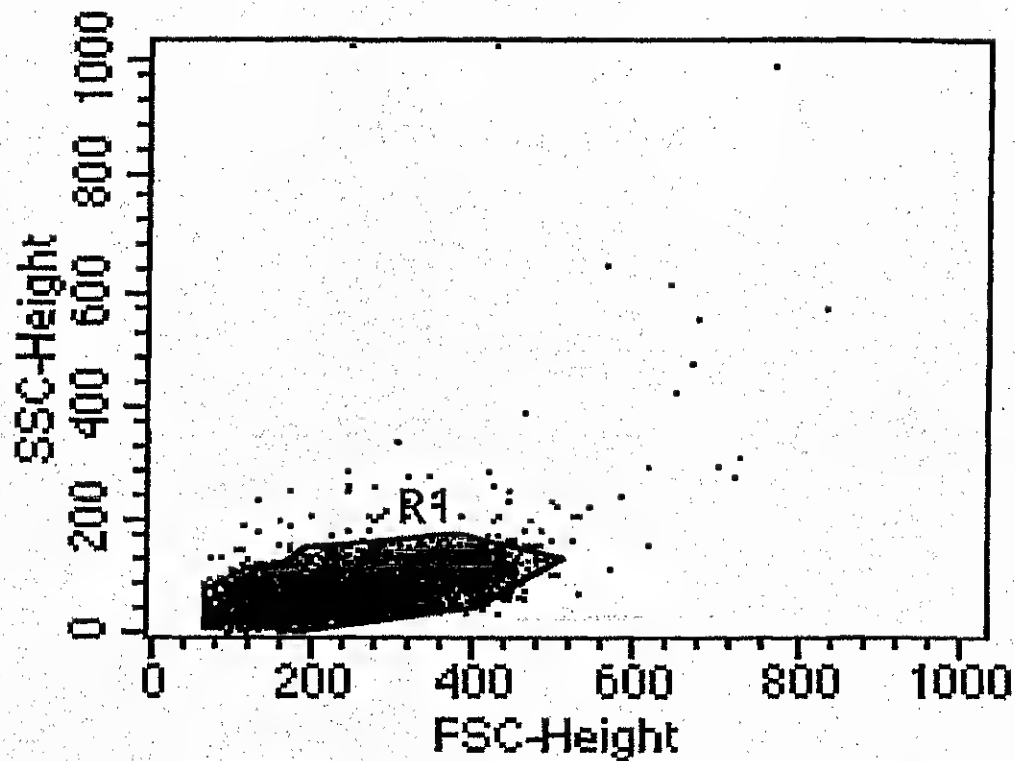


Fig.65

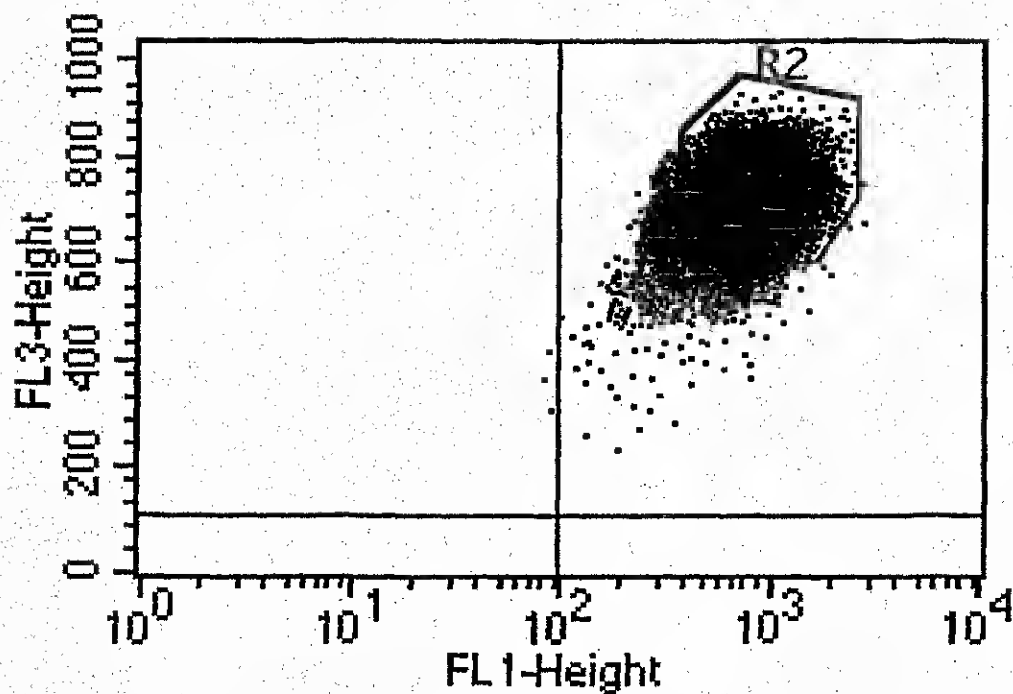


Fig.66

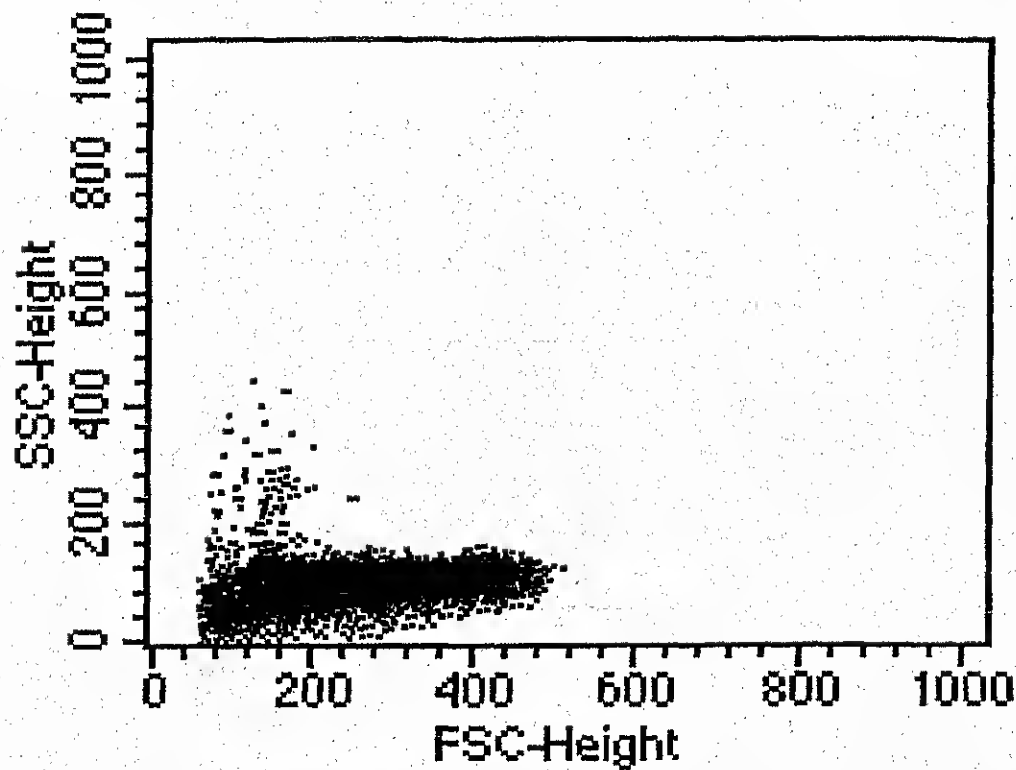


Fig.67

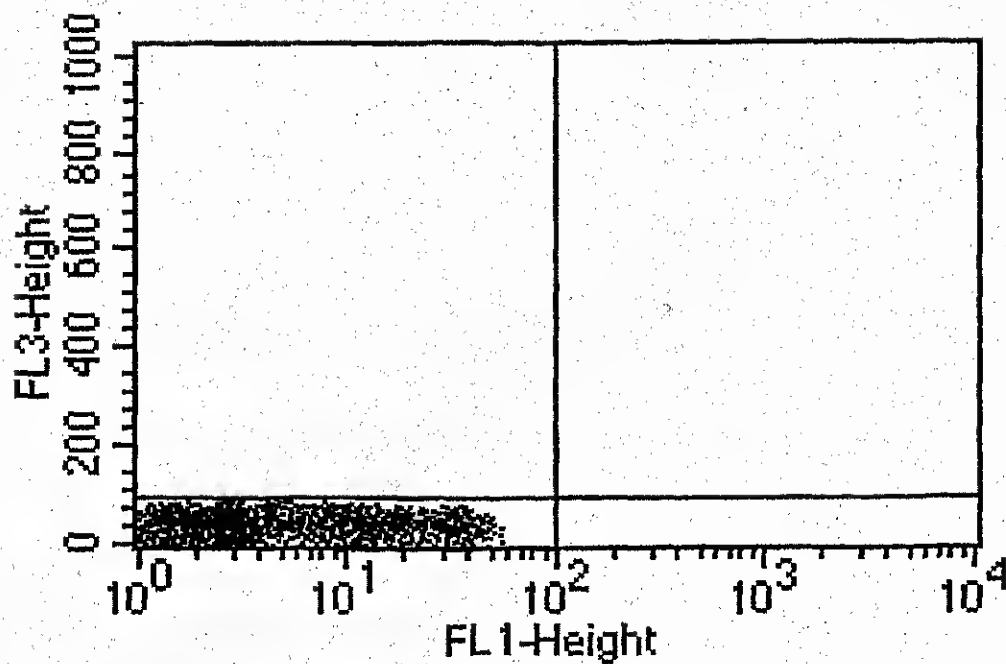


Fig.68

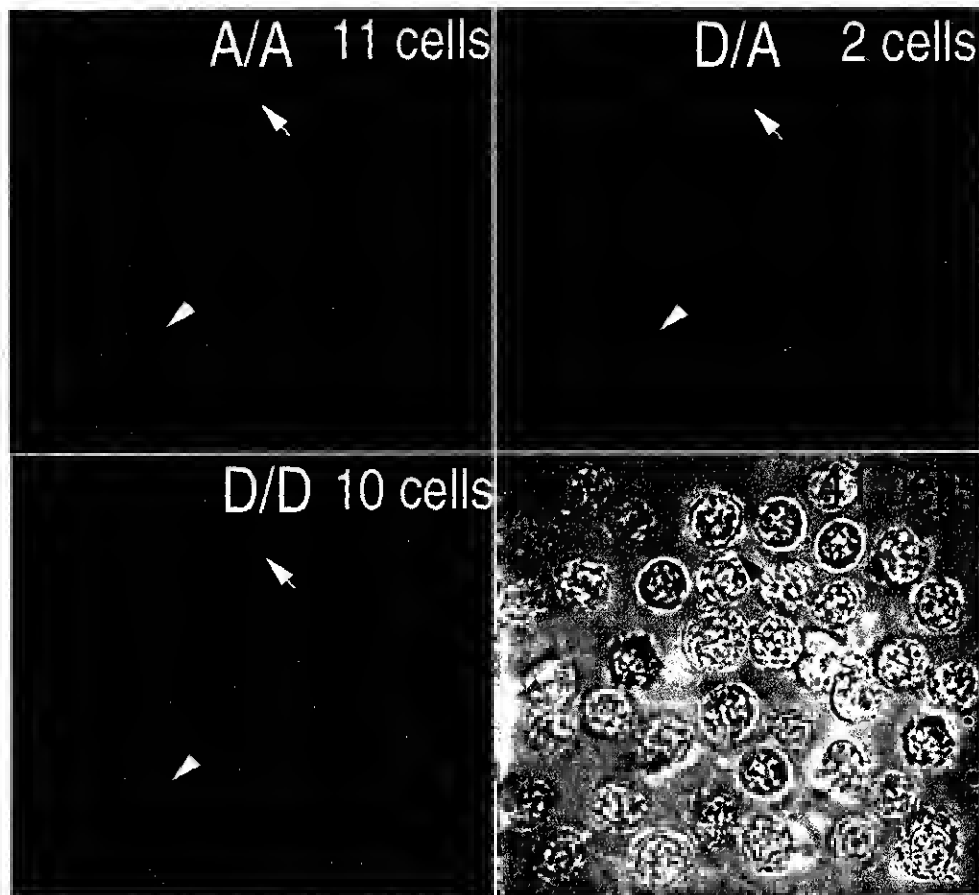


Fig. 69

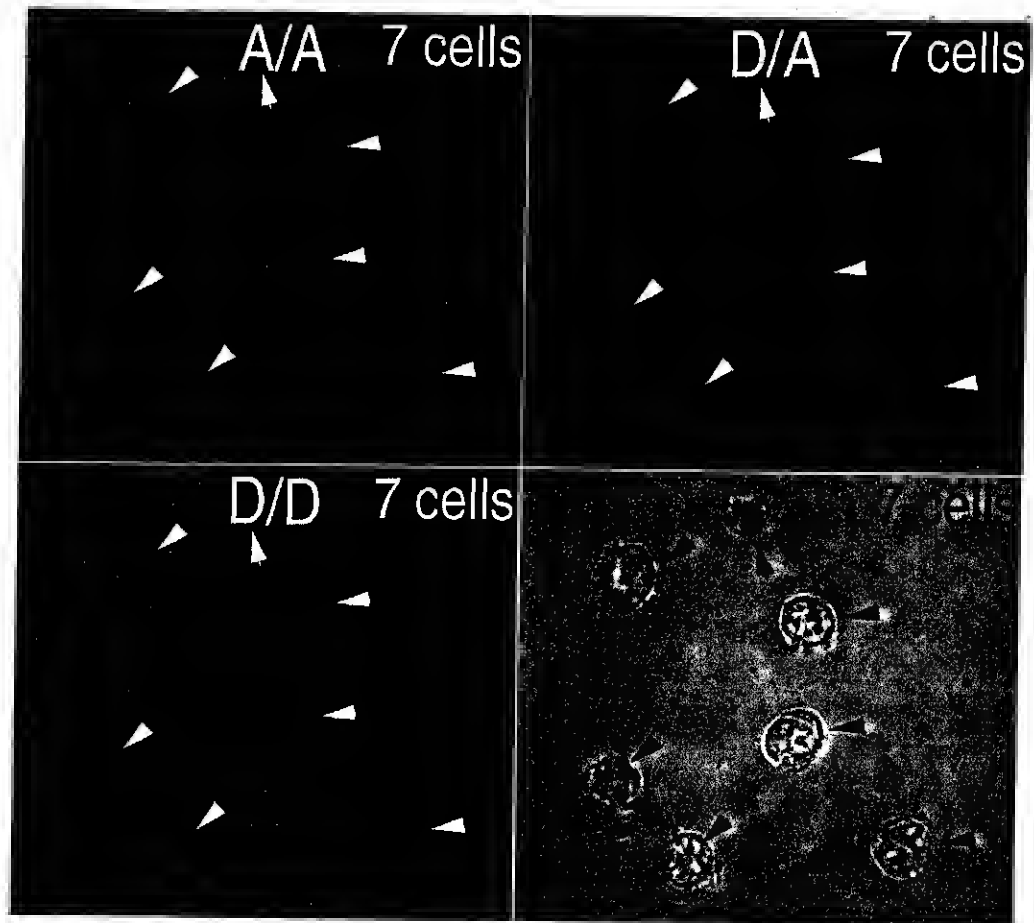


Fig.70

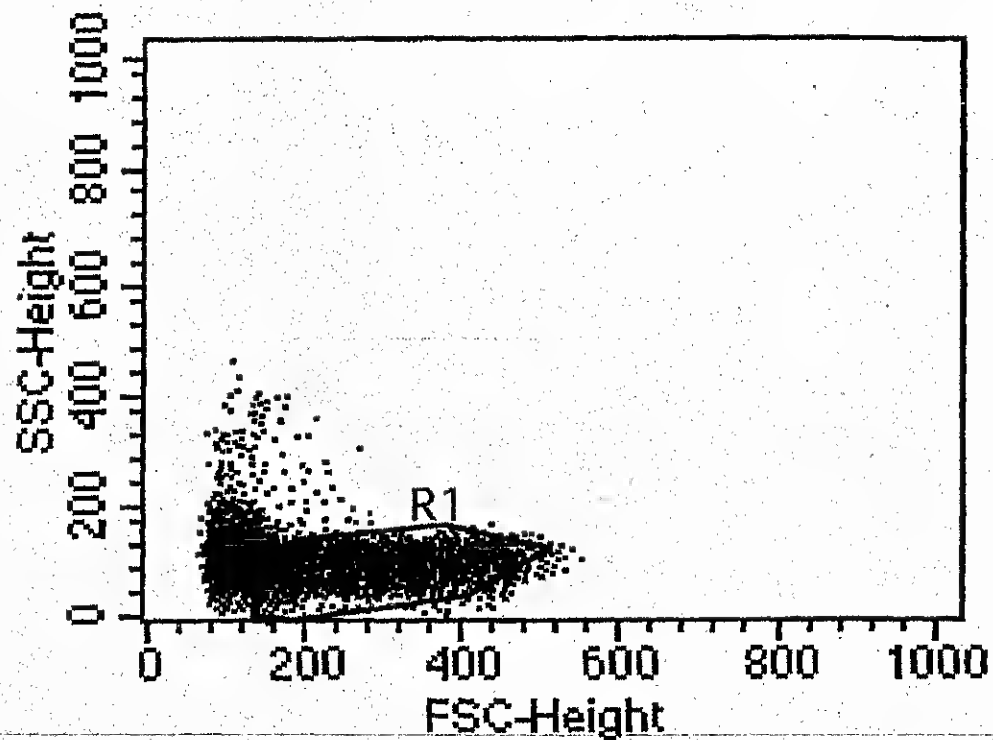


Fig.71

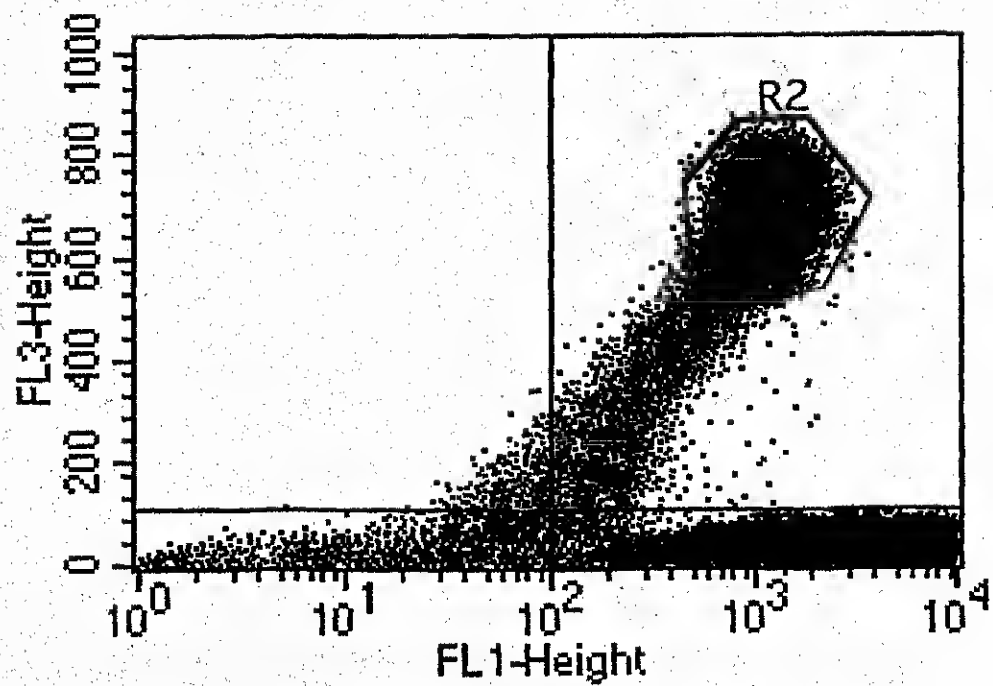


Fig.72

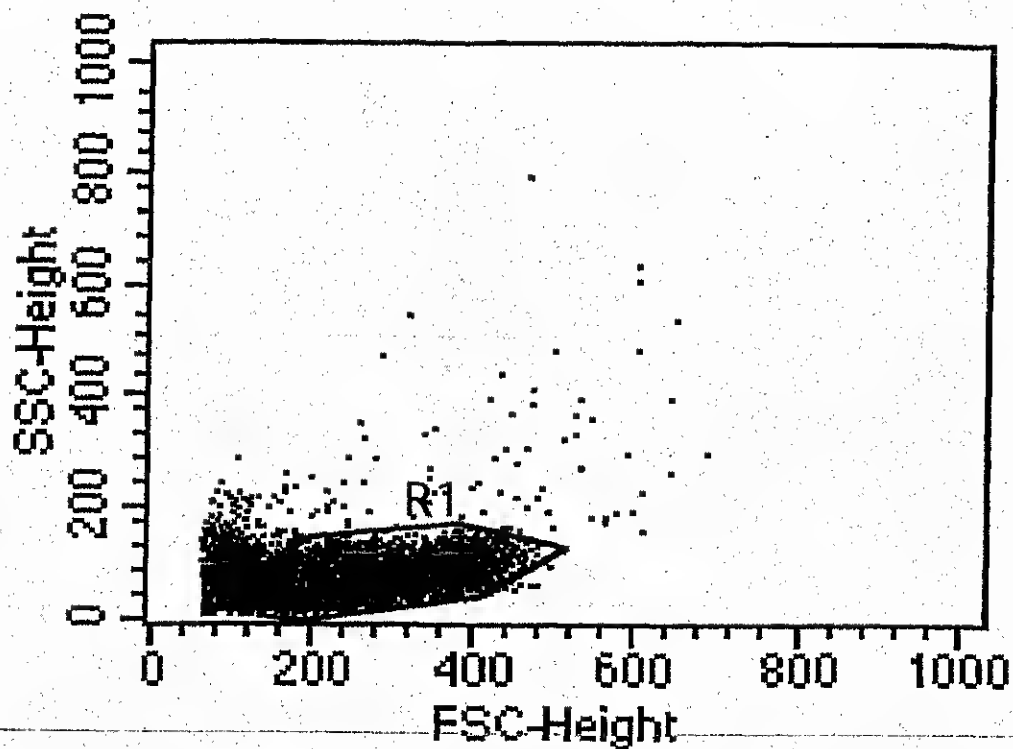


Fig.73

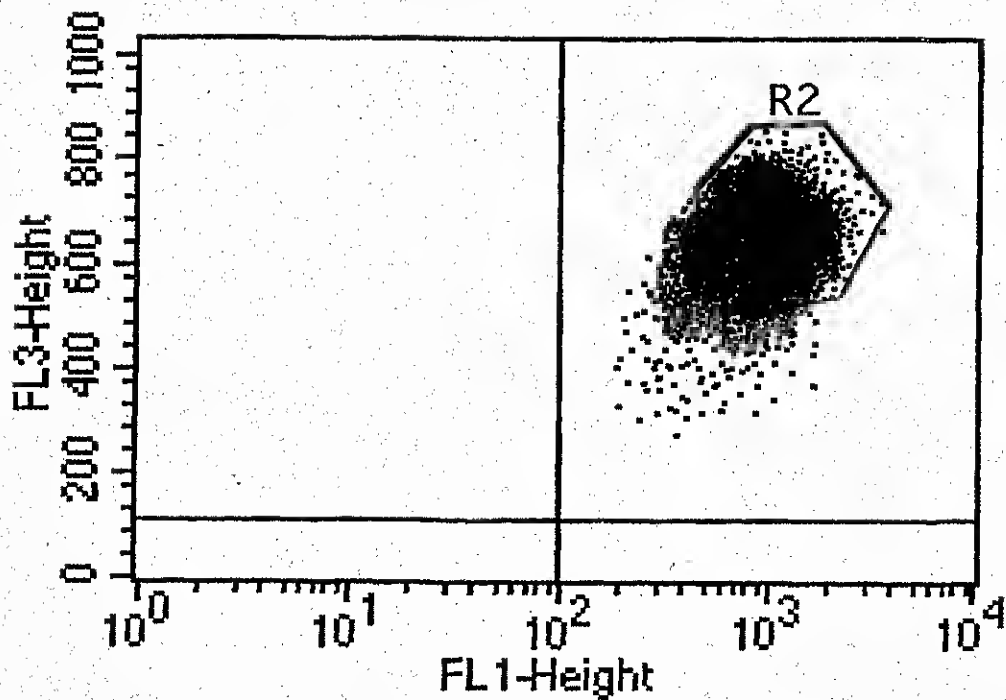


Fig.74

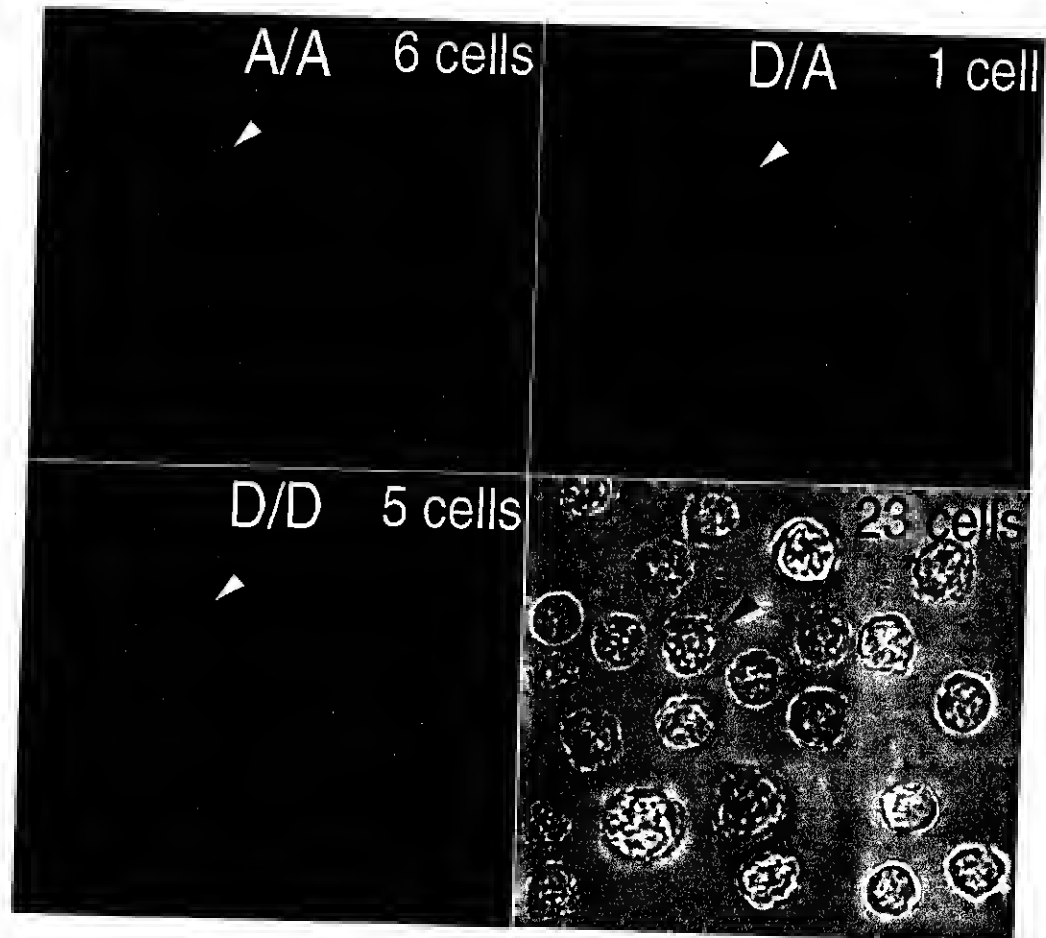


Fig.75

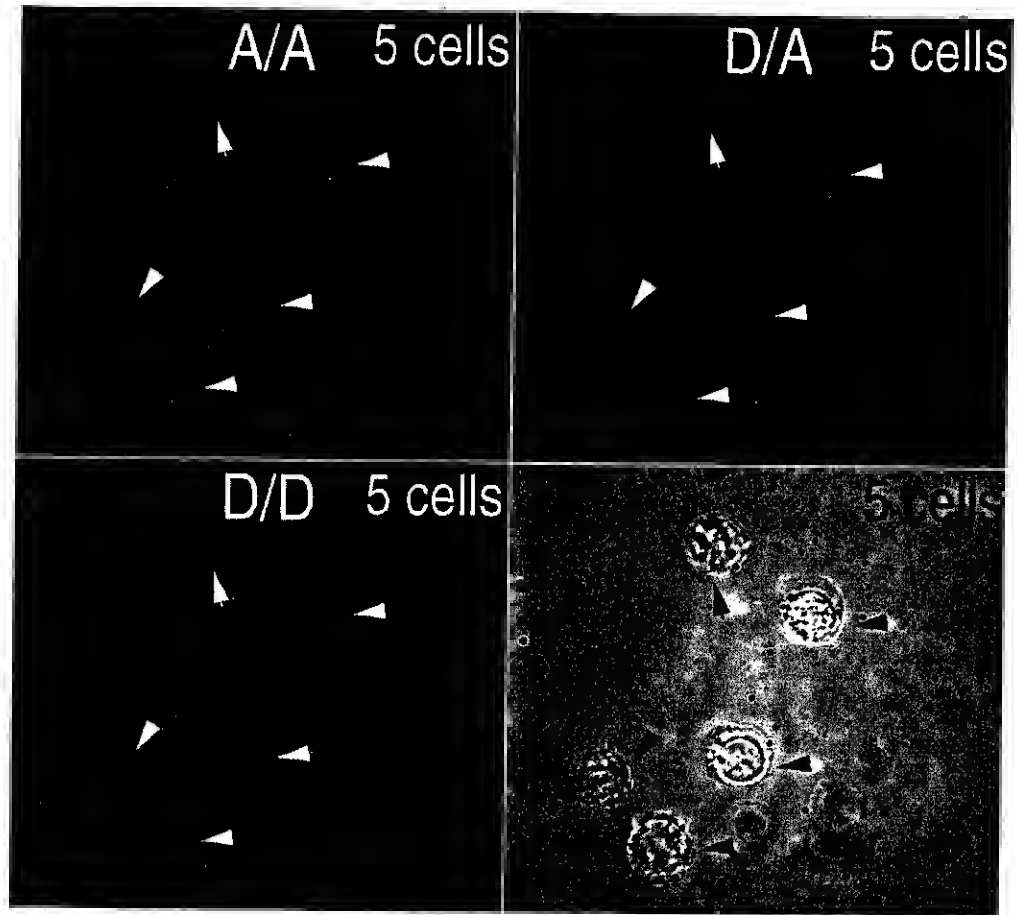


Fig.76

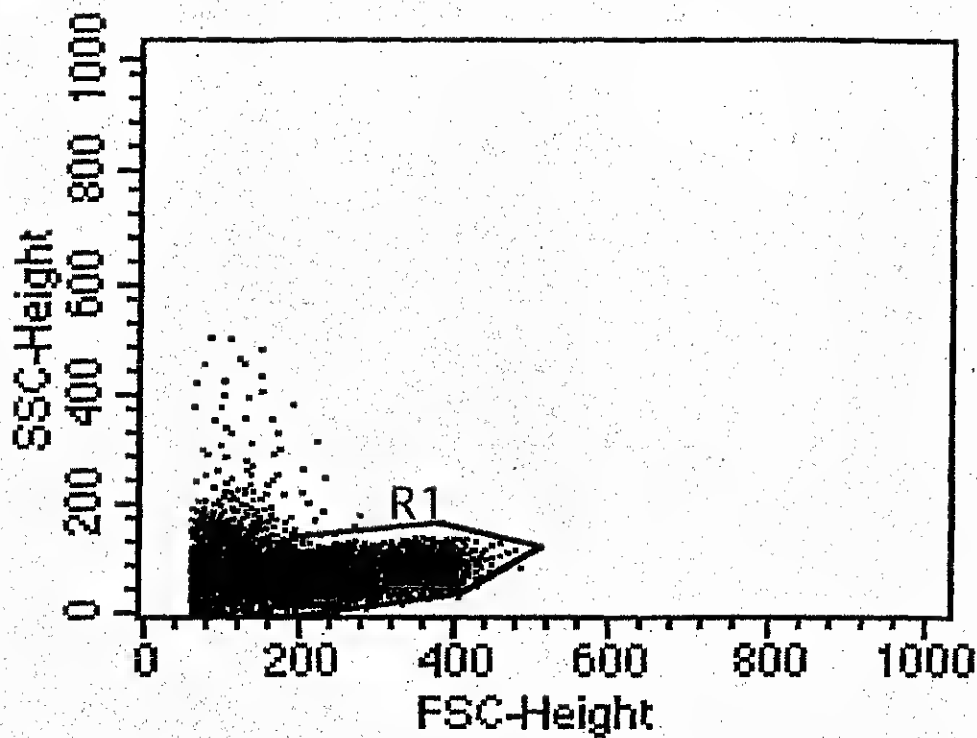


Fig.77

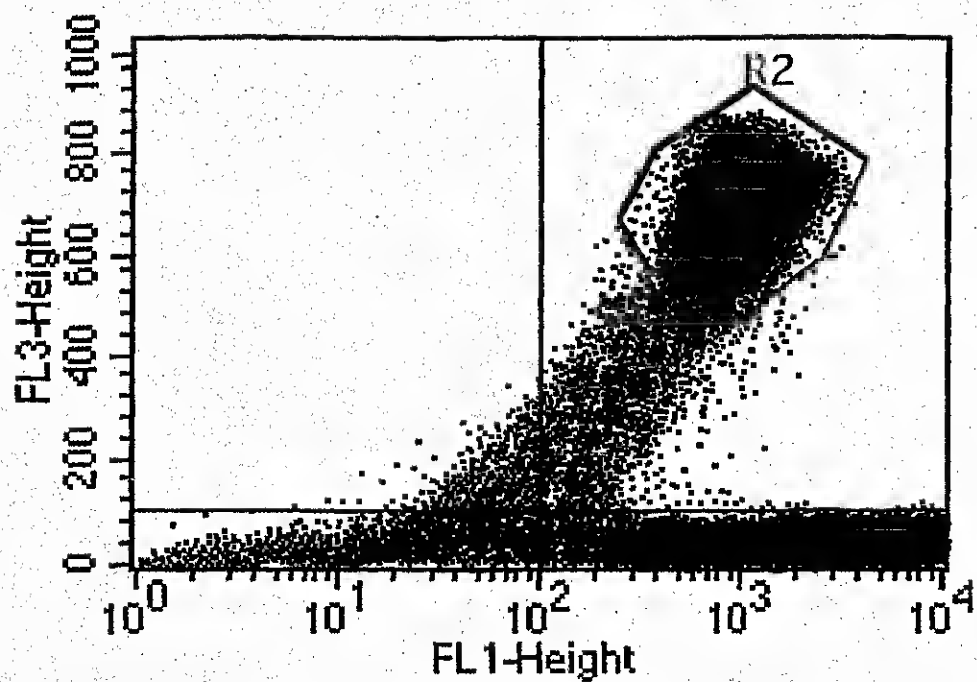


Fig.78

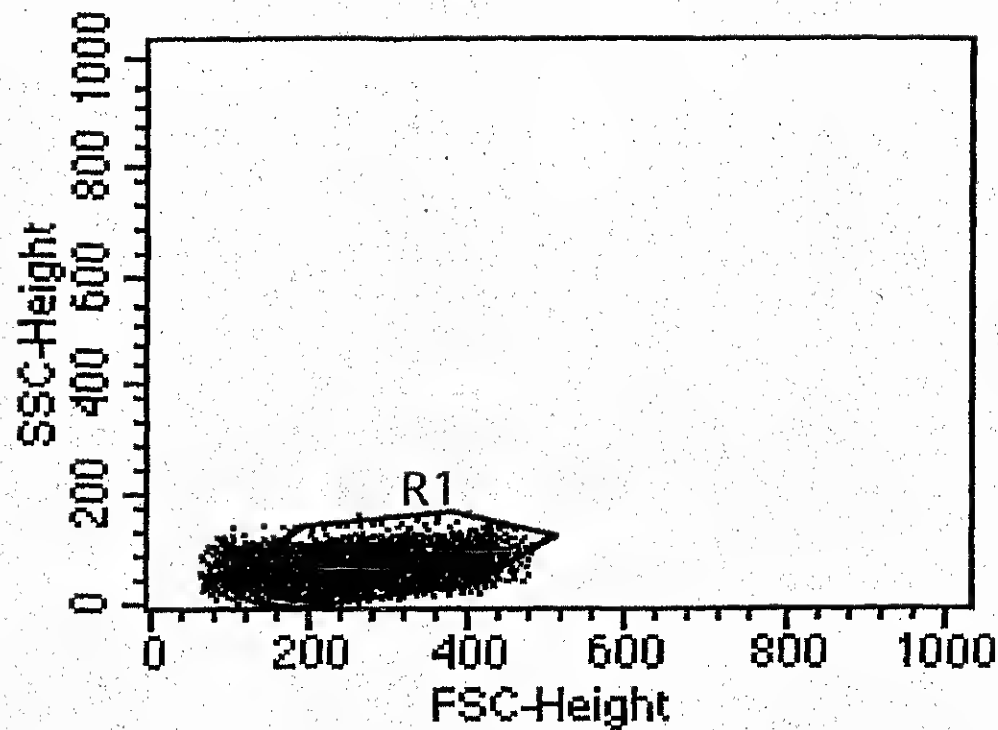


Fig.79

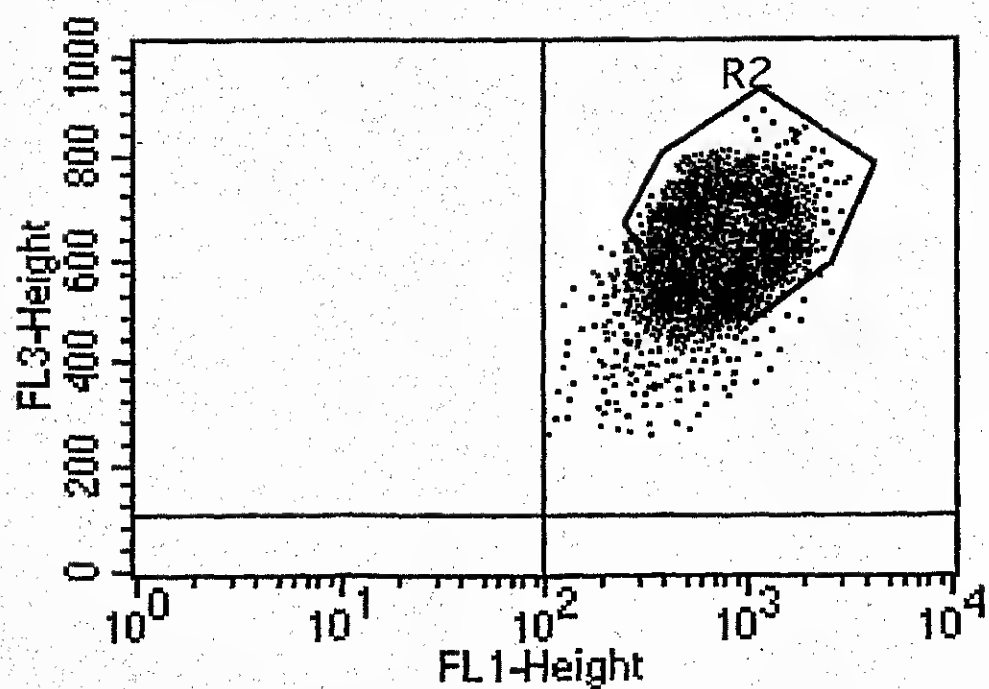


Fig.80

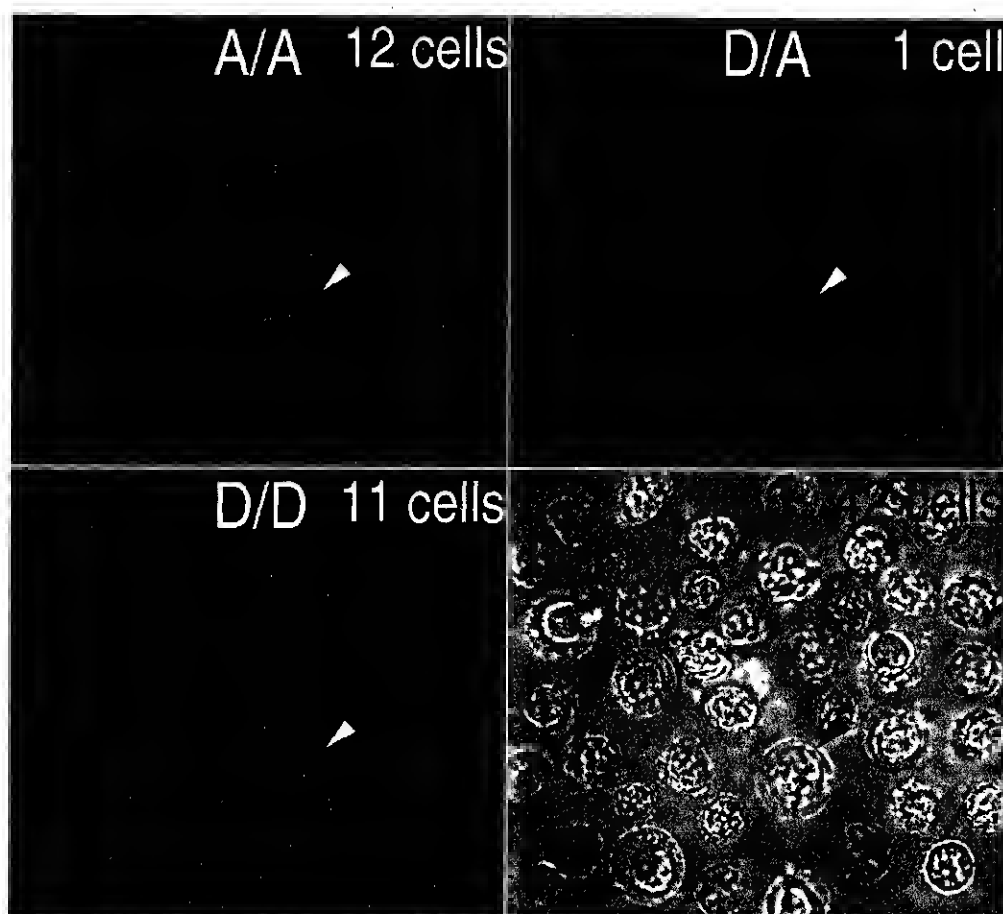


Fig.81

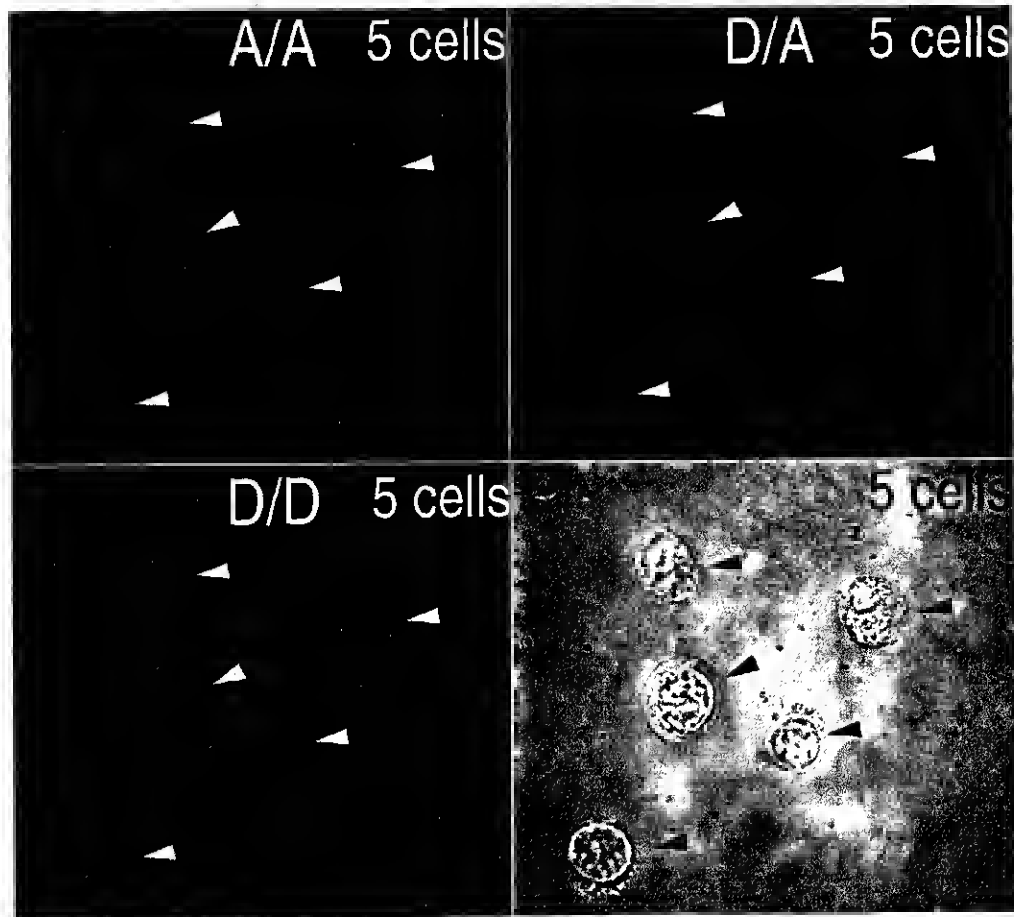


Fig.82

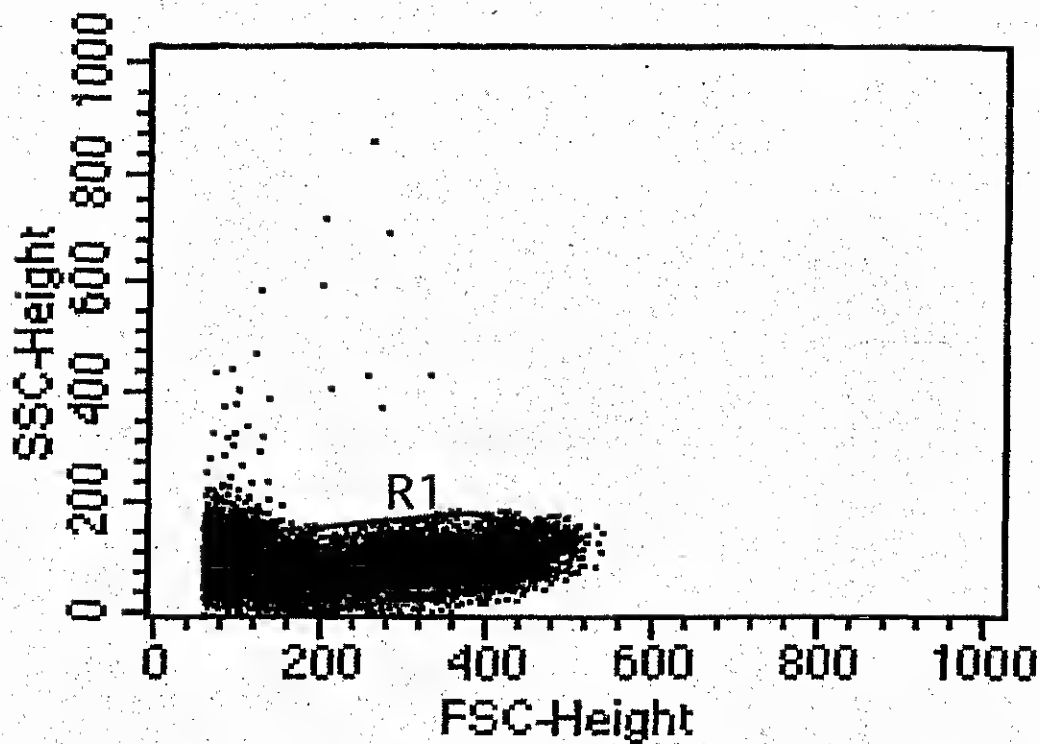


Fig.83

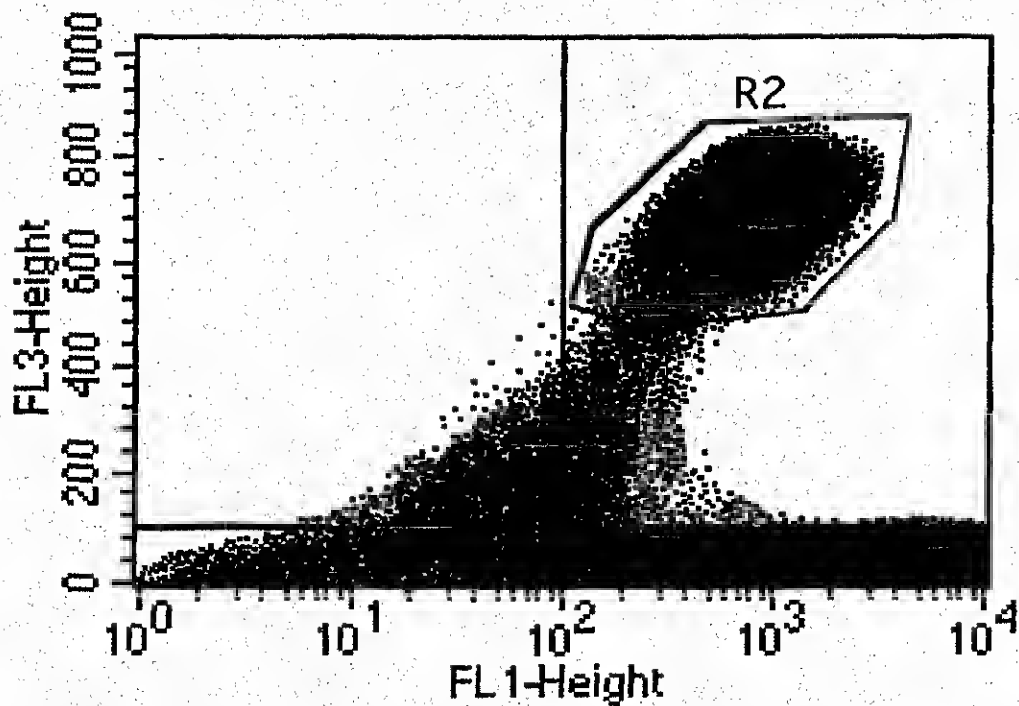


Fig.84

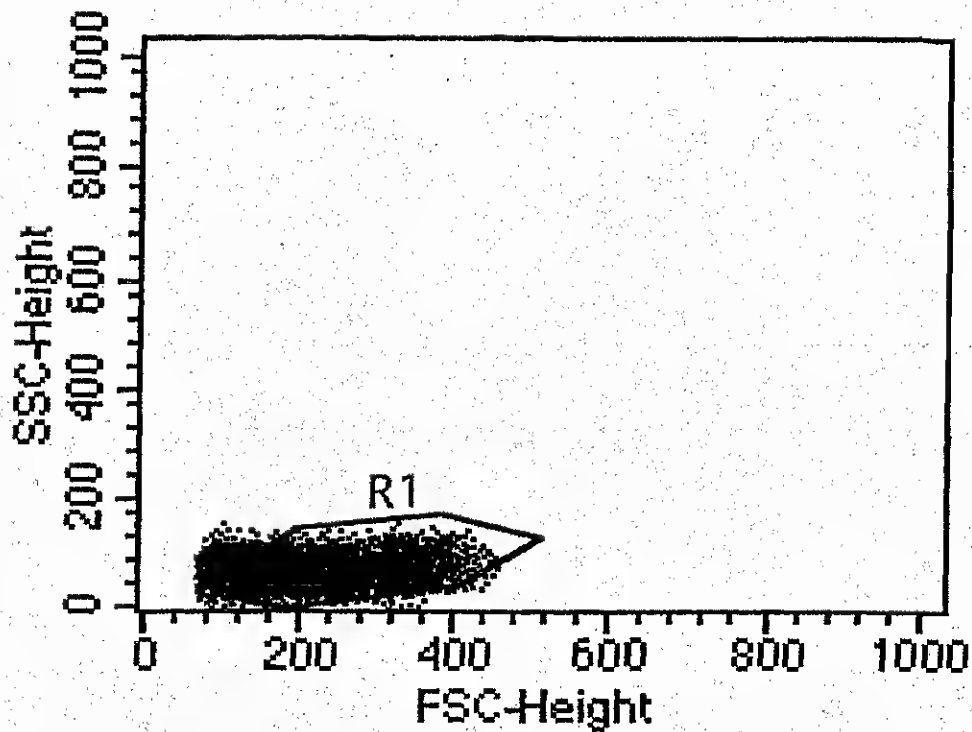


Fig.85

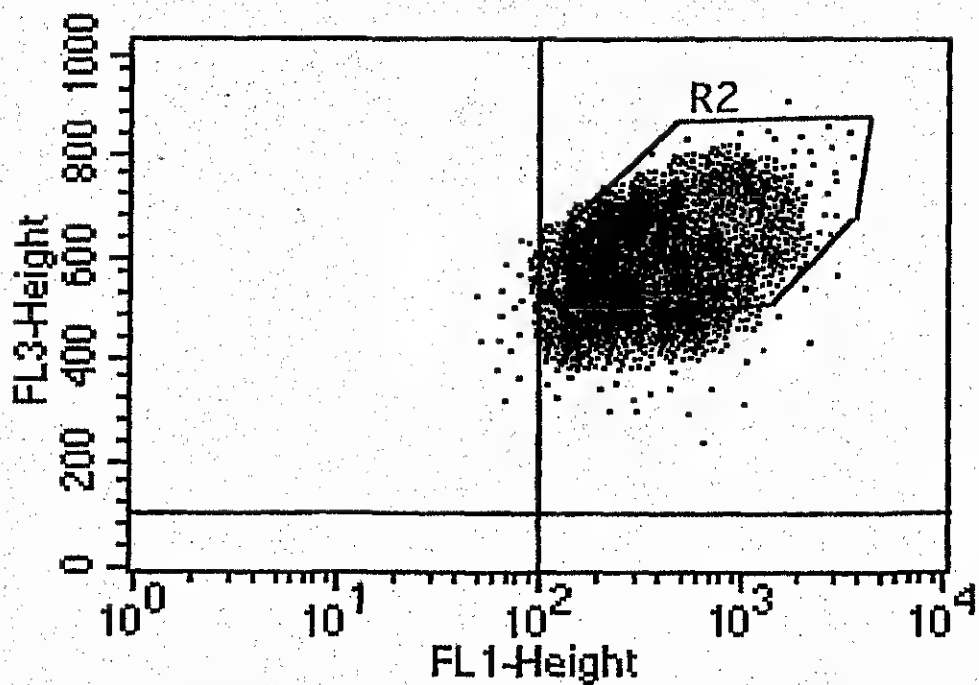


Fig.86

IL-2 mRNA (+); 5/24

IL-4 mRNA (+); 3/43

Fig. 87

| | | |
|----------------------|------------------------------|------------------------------|
| IL-2 mRNA (+); 11/11 | γ -IF mRNA (+); 14/14 | TNF- β mRNA (+); 11/11 |
| IL-4 mRNA (+); 0/10 | IL-5 mRNA (+); 0/11 | IL-10 mRNA (+); 0/9 |

Fig.88

IL-2 mRNA (+); 6/28

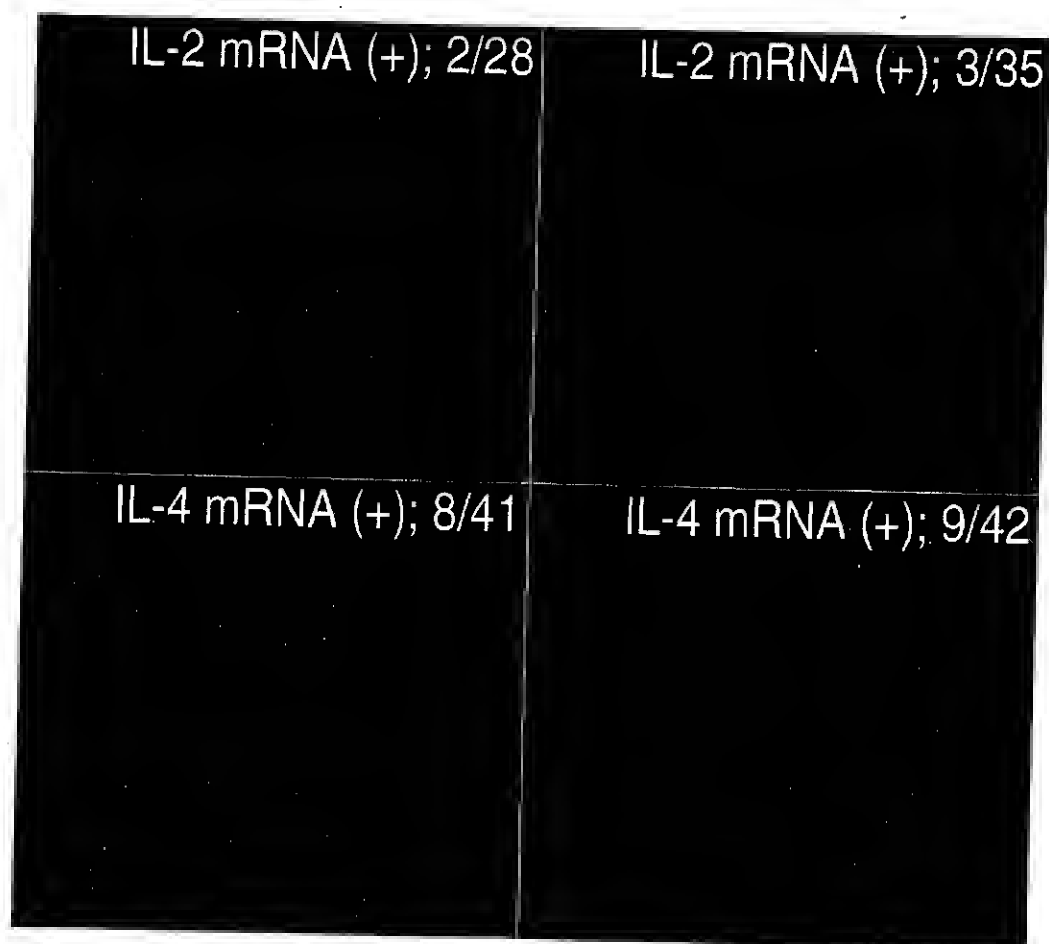
IL-4 mRNA (+); 3/42

400684 5/26/2000

Fig. 89

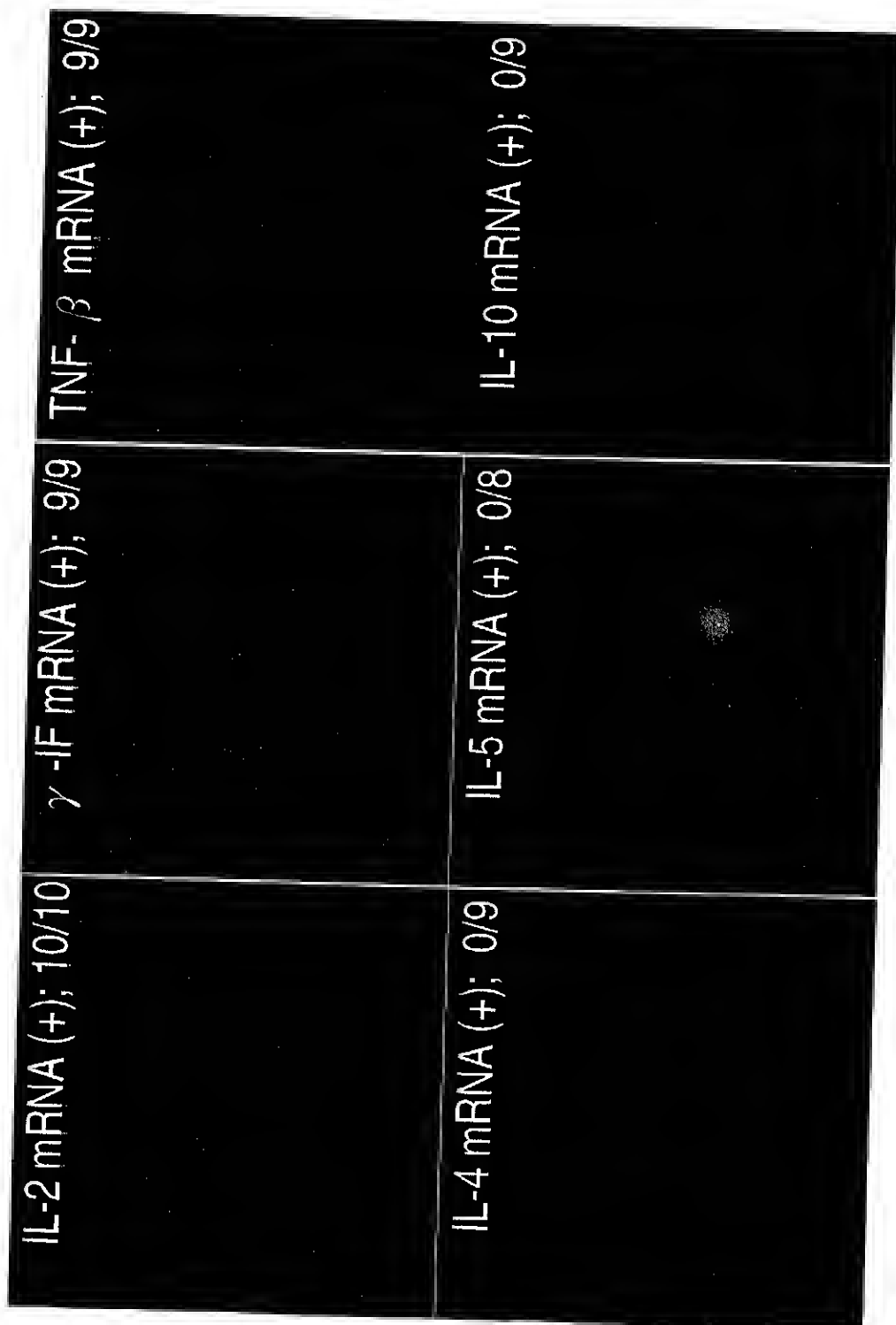
| | | |
|----------------------|-----------------------------|----------------------------|
| IL-2 mRNA (+); 0/11 | γ -IF mRNA (+); 0/11 | TNF- β mRNA (+); 0/9 |
| IL-4 mRNA (+); 12/12 | IL-5 mRNA (+); 11/11 | IL-10 mRNA (+); 11/11 |

Fig.90



Inventors: ISHIBASHI et al.
 Atty Docket No.: 400684/SOEI
 Leydig, Voit & Mayer,
 202-737-6770

Fig. 91



0500 010500

Fig.92

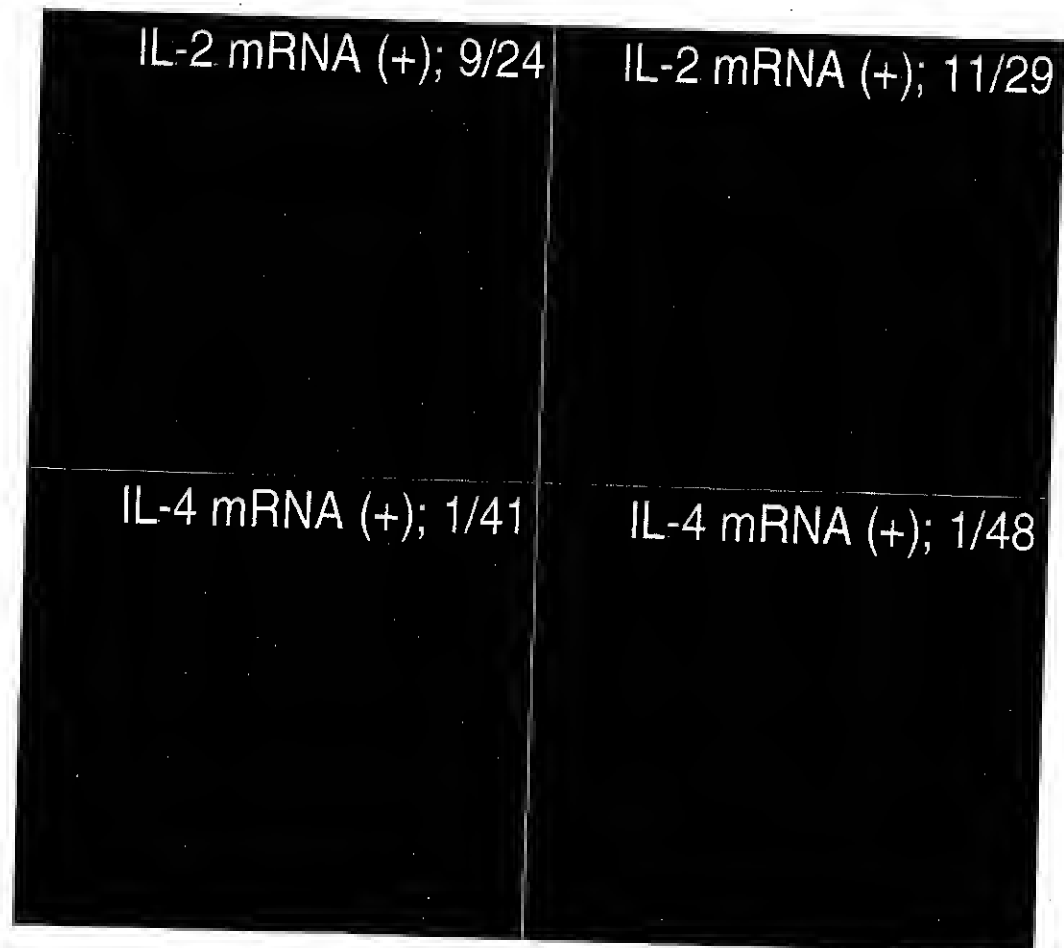


Fig. 93

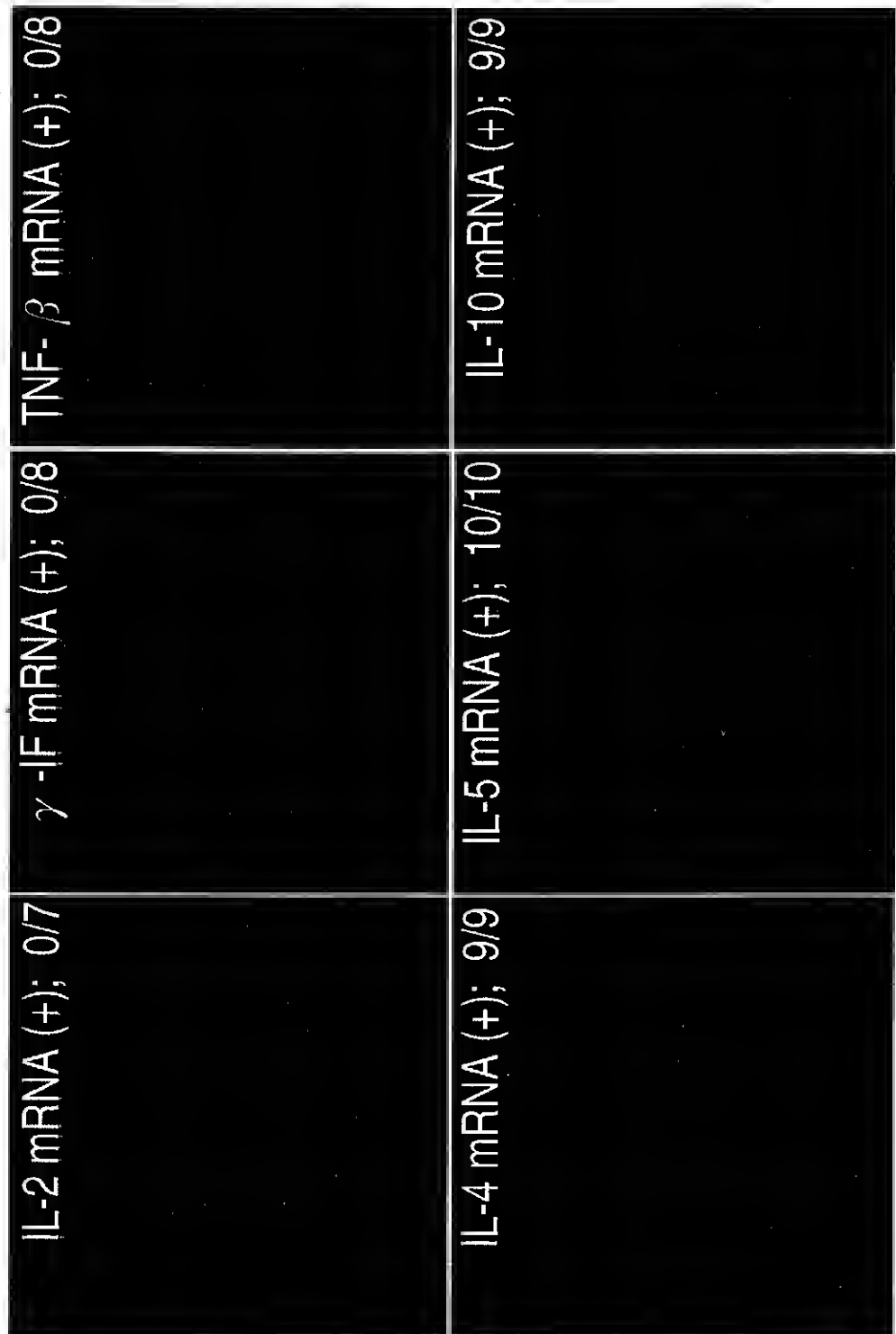


Fig.94

